

Railway Age

JUNE 21, 1941

The Hiawatha GOES DIESEL

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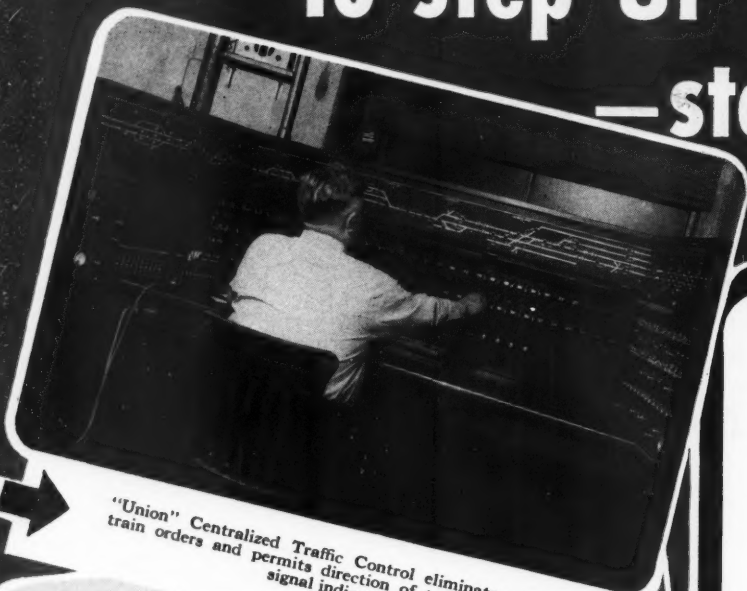
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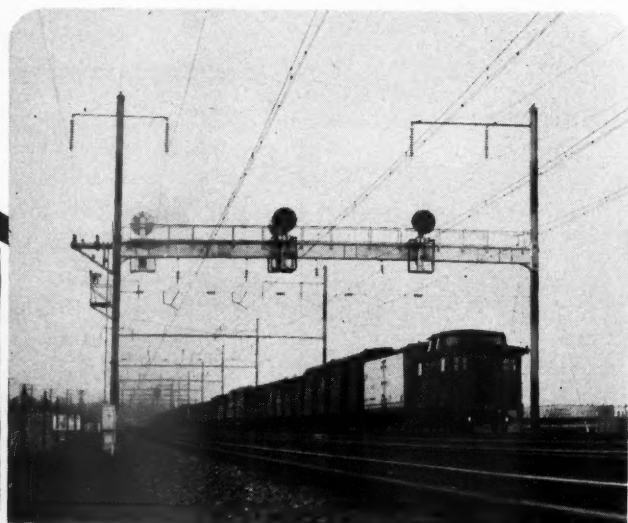


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Railroad Efficiency vs. Railroad Socialization

Right now—aside from demands of the railway labor unions for less work and exorbitant increases in pay—the most important problem facing railroad management is that of freight car supply throughout the remainder of 1941. Preliminary, however, to any discussion of this subject, attention should be called to the fact that the railways at present, in spite of the great reduction of available equipment owing to the depression, are handling a great deal more traffic than almost anybody realizes, including even railway officers, and apparently **more than they ever handled before at this time of year.**

Because figures showing the number of freight cars loaded weekly are so soon available, they are being used by almost everybody as the measure of the amount of freight service the railroads are rendering. But when statistics showing the number of **tons carried one mile** later become available, they are a much better measure, because they indicate not only the tonnage being moved, but also the distance it is being moved. Now, owing largely to the withdrawal of steamships from coastwise service, the railways are having thrown on them a great quantity of freight the handling of which requires cars to be moved extraordinarily long distances, and some of which requires them to be moved almost, or entirely, across the American continent. Consequently, the ton-mileage figures for 1941, as they become available, when compared with carloading figures, disclose that the total service being rendered by the railroads is substantially larger than is indicated by the carloading figures.

**May Freight Service 30% Larger Than 1940; 67%
Larger Than 1939; 81% Larger Than 1938**

Ton-mileage figures are presently available only for the first quarter of 1941. They show that, whereas the increase in carloadings in the first quarter was 15 per cent over 1940, the increase in ton-miles was 19 per cent over 1940—and also 36 per cent over 1939 and 48 per cent over 1938. Undoubtedly this difference between carloadings and ton-miles is increasing. But if we assume, as we are fully justified in doing, that it was

relatively the same in the first quarter and in May—the month of largest increase in carloadings—we arrive at a conclusion regarding the movement of freight on the railways in May that will astonish almost everybody. The increase of carloadings in May—over May, 1940—was 25.3 per cent. Assuming the same ratio of carloadings to ton-miles in May as in the first quarter of 1941, the number of ton-miles in May was 39 billion—an increase of 30 per cent over May, 1940; of 67 per cent over May, 1939, and of 81 per cent over May, 1938. If this estimate is correct the railways actually rendered more freight service in May, 1941, than in any previous May in their entire history—the previous May record hung up in 1929 having been less than 38 billion ton-miles.

The largest ton-mileage ever reported for any month was almost 45 billion in October, 1928. Therefore, apparently the railways would have to increase by only about 16 per cent their output of freight transportation in May, 1941, to surpass all previous monthly records. If—in view of the fact that they now have much less equipment than before the depression—their achievement in May does not demonstrate the highest efficiency in their history, and an efficiency which could only be impaired by any outside interference with their present management, we are unable to conceive of what evidence would be required to prove it.

Considerations Affecting Car Supply

Now, facing squarely the question of car supply during the rest of this year, the aspects of the situation which require consideration in any rational appraisal are the following:

1. The supply of cars, so far as the most experienced and most competent railroad men can foresee, will be adequate to meet the demand—but not by so wide a margin that hysterical fears of a shortage might not cause useless and unwarranted demands for transportation, and actually induce an **apparent** shortage.

2. While there will be no genuine shortage of cars, "tight" situations may develop here and there—and the

greatest efficiency in car utilization of which the railroads and the shippers are capable is desirable, to minimize these "tight" situations, and thus to assist both the defense effort and normal business operations by a quality of transportation equalling or surpassing the best that the carriers have ever given.

3. Aside from the desire of both railroads and their patrons to maintain an adequate and dependable service—in the interest of national defense and their common economic interest—they, both of them, have a common interest in forestalling government operation of the railroads; and both of them must know that certain "inside" office-holders in Washington will seize upon any alleged "breakdown" by the railroads as an excuse for demanding that the government take over the roads.

How to Increase Car Efficiency

These considerations require some further amplification. In the first place, as to what the traffic demands are likely to be during the remainder of the year and what facilities the railroads will have with which to meet these demands: Competent observers do not expect traffic to exceed 1,000,000 carloads weekly at the October "peak," and the railroads should have enough equipment to meet such a peak—if they and the shippers co-operate to secure the intensity of utilization of which they are easily capable. In the fall of 1939, without any advance notice, and, hence, with very little preparation, either by railroads or shippers, the railroads successfully handled a "peak" weekly traffic of 856,000 carloads. They achieved that result by translating 1.62 of their supply of "active" cars into a carload in the week of "peak" loading. By October, 1941, the railroads should have available 156,000 more "active" cars than they had in the fall of 1939—and these cars, with an intensity of utilization no greater than that in 1939, would permit the loading of 96,000 more cars this fall than were loaded at the 1939 "peak." This means that the roads, by the most conservative calculation possible, should be able to load 952,000 cars this fall.

Co-operation of Shippers Needed

But that 952,000 cars does not represent the utmost of which the railroads are capable, for several reasons, viz.: (a) the roads could have loaded several thousands of cars more than they actually did in the fall of 1939 without having suffered a definite shortage; (b) the efficiency of car utilization at the present time is greater than it was in October, 1939; (c) the present efficiency of car utilization is subject to still further improvement. Just two figures need be cited to show what has already been accomplished in car utilization—average load per car and ratio of loaded to total car-mileage. The car supply has been augmented by the equivalent of 26,000 cars by the greater average load per car attained in 1940 over 1939. And the average load per car in the first quarter of 1941 exceeded that of 1940 by almost half a

ton. Similarly, in the first quarter of 1941, the ratio of loaded to total car-mileage was $3\frac{1}{3}$ per cent higher than in the first quarter of 1940.

As to whether the railroads and the shippers can do even better than they are now doing in order to get the maximum net-ton-miles out of each car, one has only to look at some of the conditions which supervisory officers are constantly uncovering—regarding oversupply of cars to shippers, light loading of merchandise cars, delayed switching and detention of cars in the handling of company material—to be convinced that a very considerable improvement is clearly possible. The co-operation of shippers can aid materially, not only in securing heavier loads per car and prompt loading and unloading; but also in releasing the railroads from the obligation to provide excessive cars for inter-plant handling and for prospective loads.

It requires no excessive degree of optimism to believe that the railroads and shippers together can take up enough slack to provide equipment for the 48,000 carloads which represent the difference between the lowest "maximum" (952,000) which the railroads can certainly handle, and the possible 1,000,000 that they might be asked to move.

How Large Will 1941 Traffic Become?

There are, of course, prognosticators—innocent of any knowledge of railroad traffic—who believe that the demand for transportation this fall will considerably exceed the 1,000,000 maximum which informed observers expect. As to these contentions, the only thing that can be done is to "wait and see." A man is not right bright who will despair when a quack tells him he is suffering from an incurable disease if competent medical opinion is unanimous in the advice that he is quite healthy.

The authorities who believe that the present percentages of increase that carloadings are showing over last year will not continue, base their conviction upon the obvious fact that certain basic industries have now reached capacity production and cannot further expand; and that many large construction projects are nearing completion, and will produce less traffic when they are in production than they did during the construction stage. While we have seen no authoritative statistics to measure the importance of the development, it is perfectly obvious that at the present time a great deal of forward buying of "consumers' durable goods" (automobiles and household appliances, for example) is under way—in anticipation of large increases in excise taxes on these articles and of prospective sharp curtailment of supply. Before next fall, this move will have exhausted itself; and consumers, instead of spending more, as they are now, will be facing the approach of the time when they will be called upon to pay largely increased income taxes. These and other considerations all add up—in the opinion of those who have had most experience in such forecasts—to a carloadings peak next

fall well within the capacity of the railroad industry to handle it.

Malicious Prognosticators in Washington

The preceding observations sufficiently elaborate two of the three aspects of the car supply situation which were cited at the beginning of this discussion as requiring consideration—that is, the ability of the carriers to meet the demands upon them and the responsibility resting both upon the railroads and their customers to

exert themselves to improve the efficiency of car utilization, in the national and their own particular interests. There remains for attention the malicious interest of socialists on the federal payroll in the railroads' car-supply situation, and their obvious intention to manufacture socialistic propaganda out of any "tightness" which may develop; and, if they think they can get away with it, to use the pretext of an alleged railroad "breakdown" as an excuse for government operation of the railroads.

To our way of thinking, this last is the most serious and threatening phase of the whole car-supply situation.

"Costs" for Rate-Making

This paper followed very closely the hearings of the Interstate Commerce Commission in Ex Parte 91, the cost "accounting" investigation. In that proceeding an effort was made to impose upon the carriers an elaborate system of routine cost "accounting," which strove to allocate all railroad expenses to particular traffic—that is, to divide the indivisible. In common with the authorities in the field of railroad accounting, we opposed that plan and we should oppose it again if it were revived.

On the other hand, in the present period of intense rivalry between *methods* of transportation, there is no way of resolving wasteful conflict except through some comparison of their costs. It is not an easy problem. Certainly, it is not to the interest of the railroads or of the shipping public that calculations of railroad costs be made to include a theoretical return of 5 or more per cent on ancient investments which have not earned an average even of 2 per cent in many years. The principle of a "fair return" was devised to *protect the investor*, not to take money out of his pocket. Since the regulatory authorities have never leaned very heavily on the "fair return" principle to maintain railroad revenues, they cannot righteously use this device to deny the carriers traffic which they would be better off with than without.

Tentatively, we are inclined to the belief that the country is committed to the continuation of service on the bulk of the railway mileage of this country. (The reluctance of the Commission to concede the "convenience and necessity" of railroad abandonment is sufficient to validate this assumption.)

But, *he who wills an end wills also the means to that end*. The only practicable means of continuing in service the railways lines which, apparently, it is public policy to continue in service, is to permit these lines to attract all the traffic that they can more profitably handle than not (at least up until the point where they are earning a "fair return").

But the Commission has another duty which, at some points, might seem to conflict with its implied obligation to maintain the bulk of existing rail lines in operation—and that is its duty to preserve to the public the "inherent advantages" of the several forms of transportation. Superficially, it might appear that protecting the "inherent advantages" of motor service might require the rail carriers to give up traffic needed to continue them in operation. We say that this assumption is superficial because it

neglects to take into account one of the principal "inherent advantages" of railroad service. And *this "inherent advantage" is the year-round all-commodity, nation-wide service that the railroads give*.

This "inherent advantage" of railroad service is more vital than the continued operation of any particular motor carrier—because the "inherent advantages" of motor service can still be maintained (by other for-hire carriers and by private carriers) when a particular regulated motor carrier vanishes from the picture. With the freedom of private motor carriers to enter or leave the transportation field at will, it is not possible for the regulatory authorities to deny the public the "inherent advantages" of motor transportation, even if they wished to do so. On the other hand, the regulatory authorities *can* shut off the "inherent advantages" of railroad service at will—because all railroads are under regulation, not only as to vehicles but as to "way" as well.

From the above, it seems reasonable to conclude that regulatory authorities cannot consistently deny the railroads authority to make rates below (wholly theoretical) "total costs" on competitive business unless, at the same time, they agree to let the carriers abandon any line which is not earning such "total costs." (That is, if a line is able to continue in operation when it does not earn so-called "costs," then there is plainly something wrong with the "costs.")

For the railroads' own protection, they ought to have information on the undeniably-variable costs of handling business competitive with other agencies of transportation (so they will not be tempted to go out after traffic which they would be better off without).

In order that such figures may have acceptance, it would appear to be desirable that they be compiled in a uniform manner.

Our opinions on this question are not final. We should be glad to hear from any of our readers who may have considered views on this subject—either confirming or refuting the argument here presented. Wholesale routine cost "accounting" on all railroad traffic seems as questionable to us as ever it did. But, so far, we are unable to see a "way out" of the competitive transportation dilemma without the introduction, when occasion requires, of generally-acceptable and uniform data on variable costs.

It is impolitic for either railroads or shippers to discuss publicly the known intention of these conspirators (for that, in effect, is what they are); and that is one reason why an independent publication such as this one serves a peculiarly useful purpose. The government officials who have been drawn to Washington in the past eight years or so include an unusual breed which one has to see to appreciate. They are an arrogant lot of so-called "intellectuals" who know very well that it is only through the coercive power of government that they would ever be entrusted with positions of power and responsibility.

Bureaucrats Seeking to Keep Their Jobs

Once the "emergency" is passed, and with the federal bureaucracy shrunken to anything like a normal size, these officials would have to go back to the melancholy business of trying ambulance cases in the inferior courts, of correcting the class-work of college freshmen and so on. Their only hope of retaining their present pleasant power and prerogatives is to fasten state socialism on the country—so that continued jobs may be found for them in Washington where their ability never has to be put to the test of genuine effectiveness.

Ours is no mere hearsay knowledge of these fellows, their attainments and their bearing—and we do not hesitate to say that, in our considered opinion, the freedom of the American people has no more implacable or dangerous enemies. It is not disloyalty to one's country to oppose such office-holders; it would be disloyalty not to do so. They have no regard for the America we have known in the past. Their thoughts are only for an America which will so closely resemble Nazi Germany or Red Russia that there would be little to choose between them. While Hitler is a danger to our institutions, he is 3,500 miles away. We must protect ourselves against his ambitions—but it is blind folly to arm against him alone, while we ignore those in our own midst whose intentions are no less malign.

Railroads and Shippers Can Do the Job

And so, we conclude that the shippers and the railroads should discuss the car situation with the utmost candor; and make the very best plans of which they are capable to assure the maximum utilization of the car supply, in order that no incidents may develop which these enemies of free institutions can use as an excuse to bum-rush the country into government operation of railroads. But it is not alone by avoiding car shortages that these evil and unpatriotic influences should be combated. It is time for both the railroads and the shippers to make clear to the intelligent public the underlying facts about private as against government operation of the railroads—how and wherein the latter would entail enormous evils; but could bring no benefits not obtainable under private operation by **honest** co-operation on the part of government officials.

There is no reason to be terrified of these socialists on the public payroll. After all, their chief qualification for their jobs has been their inability or failure to perform anything of a constructive nature. As our country moves closer and closer to conditions of military danger, people who can **do** are going to rise in public demand and esteem, as compared with those who can only plot and destroy. Panicky fear, either of a shortage in transportation, or of the machinations of these Machiavellis, would play right into their hands. But a good job of sawing wood will serve to protect the country militarily, and the individual interests of users and producers of transportation; and it will give a push toward well-earned oblivion to the nation's most insidious (and hence most dangerous) enemies.

A "Yardstick" on the Presidential Mentality?

Expanding production is going to burden the railroads to the limit. We are expanding their rolling stock as fast as we can, but even the present orders for new cars and locomotives are competing for manufacturing capacity which could otherwise produce tanks and other items of heavy armament. The Seaway will help prevent transportation bottlenecks.

From President Roosevelt's June 5 Message to Congress on the St. Lawrence Seaway

In other words, to avoid "bottlenecks" in transportation we are to follow a plan which requires building both fixed plant and vehicles (i. e., the canal *plus* ships); instead of one where the fixed (railroad) plant already exists, and only vehicles (cars and locomotives) need to be provided. A couple of thousand modern freight cars and 20 or 30 locomotives—if kept actively busy 365 days a year between Buffalo and the Atlantic Seaboard—could handle the most optimistic traffic level of which this Seaway would be capable and at an infinite fraction of the capital cost.

With the present strategic needs of ships for ocean transportation, how many new vessels can the shipyards be called upon to produce for *domestic* traffic—which can be handled more quickly and more cheaply (12 months a year instead of 7) in freight cars? If ships, rather than freight cars, are the correct answer to the nation's *domestic* transportation problem (as implied by President Roosevelt's message on the St. Lawrence Seaway), then why is it that ships are now being *withdrawn* from coastwise and intercoastal service and their traffic diverted to the railroads?

For the sake of the national safety it is to be hoped that President Roosevelt is less muddled and/or lacking in candor when he deals with matters having to do with military defense than every informed transportation man must know him to be on this Seaway. When he gives a fireside chat on questions relating to supposed military threats to the nation, can we safely assume on mere hope that he is being more forthright with his facts and less illogical in his conclusions than he is in his defense of this Seaway? And, if so, why?

A. N. Williams Leaves Lehigh Valley to Head Western Union



Albert N. Williams

ALBERT N. WILLIAMS, president of the Lehigh Valley since January, 1940, and active head of the railroad since his election as executive vice-president and chairman of the board on August 1, 1939, was elected president of the Western Union Telegraph Company at a special meeting of the board of directors of that utility on June 17. Effective date of his resignation as president of the railroad is expected to be announced as soon as his successor has been named. In becoming Western Union's head, he succeeds Roy B. White, who has been president of the Baltimore & Ohio since June 1.

That the railroad and telegraph businesses are closely related is well illustrated by such exchanges and counter-exchanges of top-rank executives. Mr. White was president of the Central of New Jersey before assuming presidency of the Western Union and after some ten years with the latter concern has returned to his chosen field of railroading. Hence Mr. Williams will not be straying far from "the reservation."

Mr. Williams, who is 53, has enjoyed a most versatile career in the railroad business. Although academic training in engineering at Yale University's Sheffield Scientific School is a major item in his preparation for leadership, he put in time in the ranks out on the track and in the shops to develop the practical side of his knowledge. Two years after graduation, he started up the operating ladder with the post of trainmaster. As president and general manager of the Belt Railway of Chicago, he made an outstanding contribution to the science of railroading in his modernization of terminal operations. Big Clearing yard he completely rebuilt and equipped with car retarders to increase capacity at peak hours; added modern transfer locomotives to the roster and instituted through scheduled runs between the respective yards of the 22 carriers with which the "Belt" connects and between their yards and Clearing.

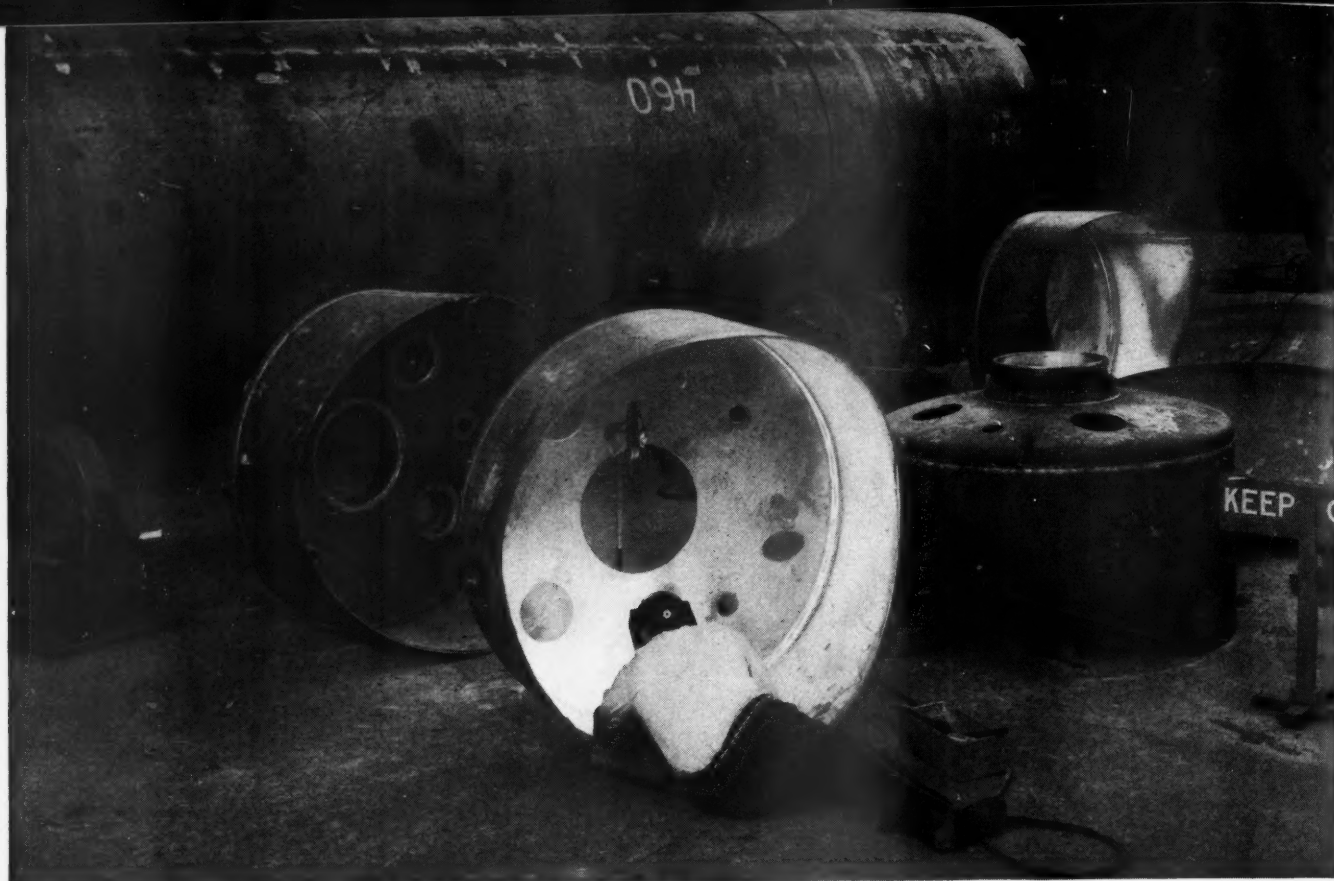
During his short time as Lehigh Valley president, Mr. Williams has continued and intensified the program to perfect facilities for the haulage of expedited, high-class freight traffic in a highly-competitive field. Engine

terminals and yards designed for the days when the road was chiefly an anthracite carrier operating lots of slow "drags" and mine runs have had to be entirely revamped,—abandoned in some cases and re-designed in others for "main-trackers" and long engine runs. The program of the "Valley" to regain passenger traffic, which was begun during Duncan J. Kerr's administration, he pushed forward, so that all of the through passenger trains now carry colorful red-and-black modernized or new rolling stock.

Perhaps for the first time in his railroad career, Mr. Williams had to devote a good portion of his time to pressing financial problems. Unable to meet interest and maturity payments, the road followed the Baltimore & Ohio in seeking to adjust its capital structure under the Chandler Act, thereby avoiding expensive bankruptcy proceedings. Considerable work in inducing holders of a total of \$105,836,000 of securities affected by the plan to assent thereto was necessary before court approval was finally given in August, 1940. Even more difficult was the problem of New Jersey taxes. As owner of extensive water-front terminal properties in Perth Amboy and Jersey City, the Lehigh Valley has been particularly burdened by the state's confiscatory tax levies. Although less than one-sixth of its 1,269 route-mi. lie in New Jersey, the company was charged \$16,434,764 in taxes for 1932 to 1940, inclusive. Of this amount it has paid \$11,884,870; the remainder of \$4,549,894 remains in litigation. While recent federal court decisions have gone against the railroads in the state, intensive efforts in the education of the public and their legislators may bear fruit in bills just introduced to lower assessments in the future.

Mr. Williams will head the country's largest and oldest telegraph company. Its total used land-line properties (exclusive of extensive oceanic cable and foreign wire properties) were valued at almost 85 million dollars back in 1919 by the Interstate Commerce Commission. Since its operations extend to practically every village

(Continued on page 1119)



MARKING a new development in railroad equipment, five nickel-clad steel tank cars have been completed at the Milton, Pa., shops of the American Car and Foundry Company. They are the first all-welded units of this material and are designed specifically for carrying a variety of chemicals and other products whose color and purity must be protected against metallic contamination.

Each tank is over 32 ft. long and mounted on standard underframes and trucks. The diameter is 86¼ in. and the heads are flanged and dished. Fittings are either of pure nickel or are lined with pure nickel sheet. Tank capacity is 10,000 gal.

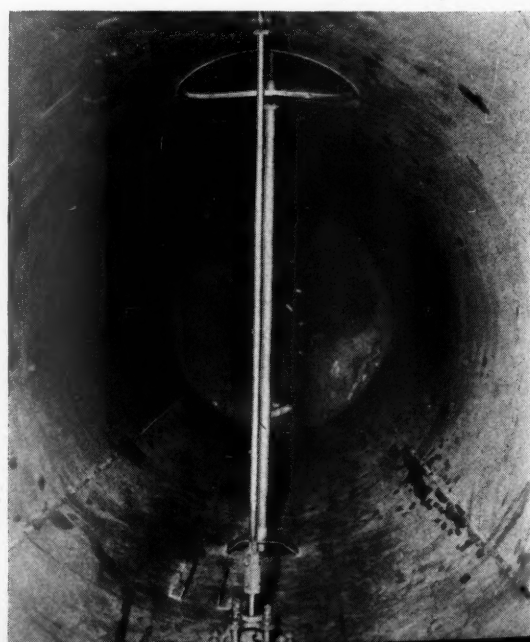
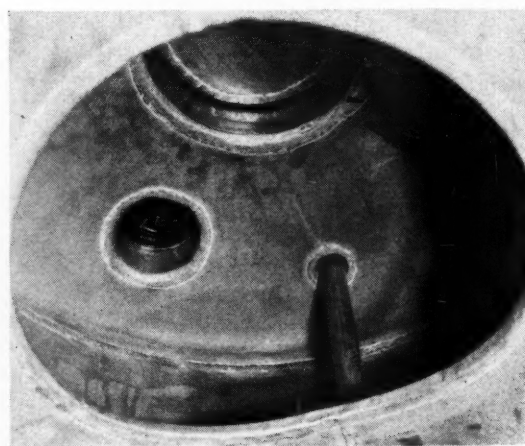
It is believed that the use of the welded, rather than riveted, tank construction will cut down maintenance cost. In some cases where liquids have been loaded in riveted cars at relatively high temperatures this heating and cooling cycle has resulted in loosening the rivets with the result that the outer shell and insulation must be removed and the loosened rivets replaced. With welded construction it has been found that the joints are stronger than even the parent metal, and since there is nothing in the tank to loosen, either from temperature variations or vibration, maintenance on a welded car should be less.

These cars embody several structural features of interest. The tanks are built of a nickel-clad steel sheet having a layer of nickel approximately .025 in. on the interior in contact with the lading. All tank seams are welded by the Linde Air Products Company's Union-melt process on the outside while the interior of the butt joints are welded manually with pure nickel electrodes, thereby completing an all-nickel lining.

In welding, the plates are first bevelled on the steel side. This is followed by fitting the plates together, tacking, and automatically welding on the steel side. The joints on the nickel side are then chipped to remove any unwelded steel and to obtain a clean, uniform groove into which two layers of nickel weld are deposited by electric arc welding. All welds are X-rayed to meet I. C. C. specifications.

The nickel-clad steel is manufactured by the Lukens

Five Nickel-Clad



Steel Company. This company, in collaboration with the International Nickel Company, developed a special process for its manufacture. A slab of pure nickel is placed on a slab of steel before rolling, the proportions of the two depending upon the relative thicknesses of nickel and steel desired in the final product. The tanks of these cars have bottom sheets $\frac{1}{2}$ in. thick and two upper sheets of $\frac{3}{8}$ -in. thickness, including the nickel layer. For both sizes of sheets, the thickness of pure nickel in the final product was approximately .025 in. Before rolling, two such combination slabs are placed together in a sandwich form with the nickel face to face but separated by a parting compound. The slabs are then tack welded together along the middle of the slabs and heated to the proper temperature before rolling. The rolling process forms a permanent bond between the nickel and the steel and, after rolling to the required thickness, the sheets are pulled apart at the center where the parting compound is used, with the result that two nickel-clad steel sheets are obtained. Before the sheets are rolled, the nickel surfaces are cleaned in order that no iron particles will be picked up from the rolls and imbedded in the nickel.

In order that the lading may be heated, if necessary to facilitate emptying, a "cradle" of flattened pipe coils

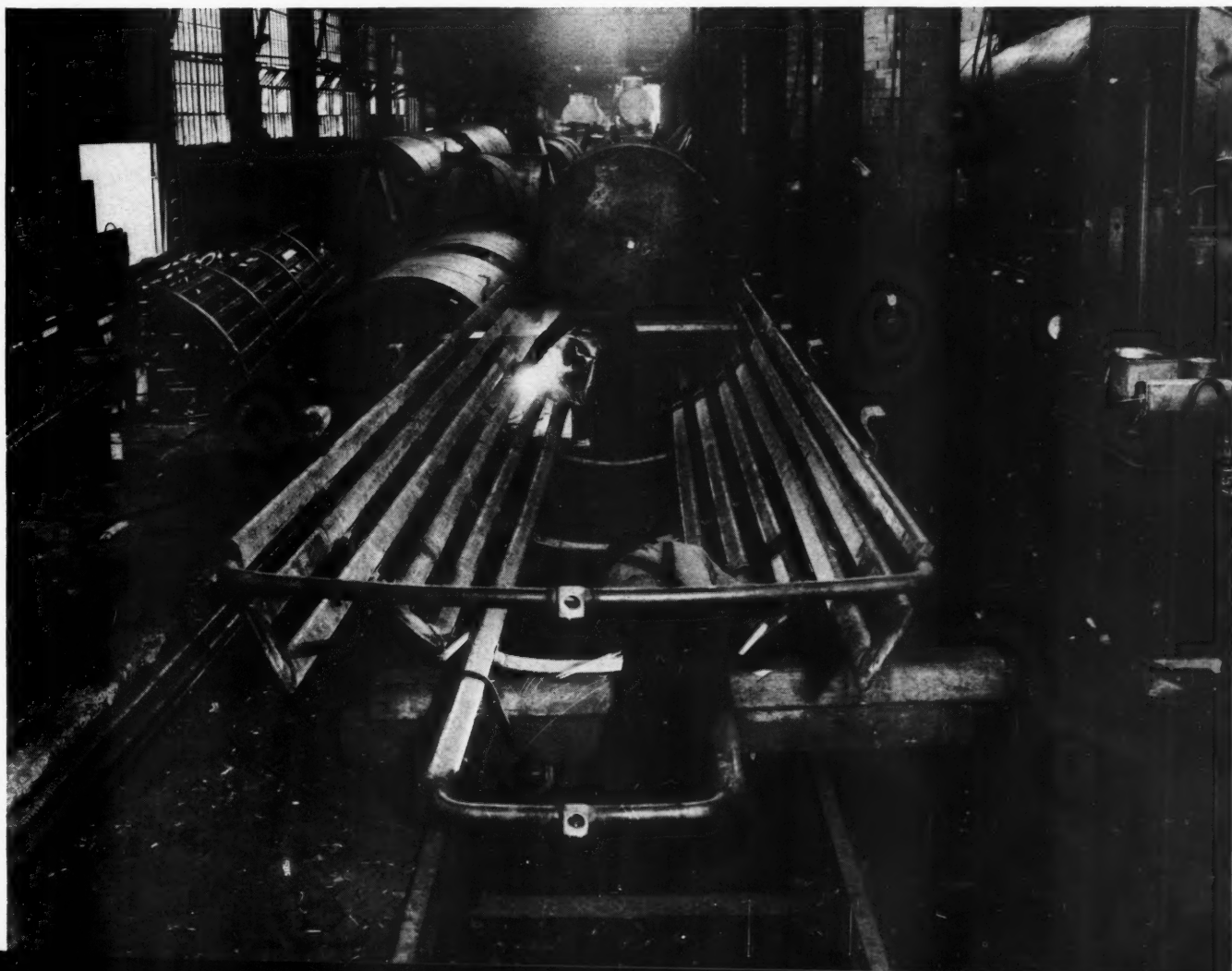


for steam heating is secured to the tank and buried within the six-inch Fiberglas insulation between the tank and the steel outer casing. These steam-heating coils are made of large-diameter pipe flattened into an extreme oval shape in order that the contact area between the pipes and the tank would be increased and thus give better heat transmission. There are six lengths of coil on each side extending almost the full length of the tank. These

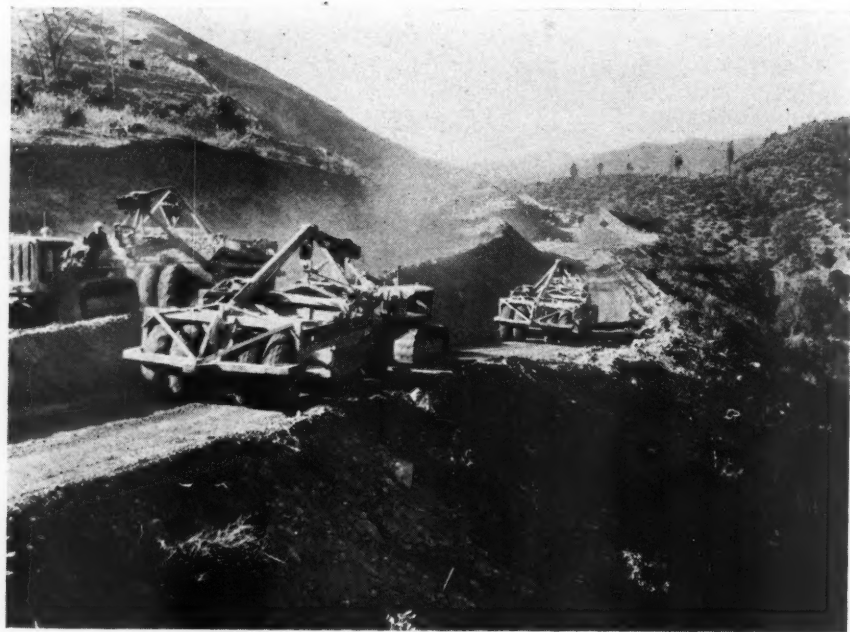
(Continued on page 1114)

Steel Tank Cars For Chemicals

The Photographs on These Two Pages Show Details of the New Nickel-Clad Steel Tank Cars Built for Service Where the Lading Must Be Protected from Metallic Contamination. On the Opposite Page a Welder Is Shown Applying Nickel Welding Rod to the Inside Joints of the Dome, with Two Other Tank Interior Views Below. On This Page Is the Heating "Cradle," and a Completed Car.



Railroad Grading Reaches on Southern Pacific



Application of earth dam and special features to fills and stable free-drain maintenance costs during

Twenty-Five Large-Capacity Tractor-Hauled Carry-alls Formed the Nucleus of the Modern Grading Equipment Employed

EMPLYING soil analysis and compaction methods developed in recent years in connection with federal earth dam construction, what are believed to be the most scientifically conducted grading methods ever employed in railway line construction in this country have been used in the building of the 30.1-mile relocation of the Southern Pacific's San Francisco-Portland single-track main line around the Shasta Dam project of the Federal government in Northern California. In this grading work, which is being done under the direction of the United States Bureau of Reclamation of the Department of the Interior, and which involved more than five and one-half million cubic yards of excavation in cut and fill construction in rough mountainous territory, the science of soil mechanics, combined with the use of modern grading equipment, was employed to the fullest extent to produce compact, water-tight, non-subsiding fills and free-draining stable cuts.

Occasioned by the huge Central Valley Irrigation and Flood Control project of the Federal government, which is forcing the railroad from its long-established stable roadbed in the Sacramento River valley, the new line of the Southern Pacific is being built at government expense. In building to such a high standard, the government had a two-fold interest—first, to produce a line of early high stability for train operation in an inherently difficult country, and second, to minimize roadway and track maintenance costs on the new line during its seasoning period. In the latter regard, the government had more than ordinary interest because it had assumed the responsibility for excess maintenance costs on the new line during the first five years of its operation. That its efforts to produce highly stable cuts and fills in the original construction will have a large effect in lowering roadway maintenance costs during the seasoning period,

and will reduce materially the length of this period, is unquestioned, while, at the same time, the railway will enjoy the benefits of operating over a more stable roadway than could have been expected if any less modern methods of grading had been employed.

General Aspects of Line

The newly relocated line around the Shasta dam, which is expected to be put in operation early in 1942, replaces 37.0 miles of route in the Sacramento River valley, about 19 miles of which lies within the area of the large reservoir that will be impounded by the dam in this valley. Some of the outstanding features of the new line other than the grading, are that it involves 12 tunnels with an aggregate length of 19,070 ft., and 8 bridges having a combined length of 12,214 ft.

Taking off from the existing line, at the north end, at Mile Post 295.67, near Delta, Cal., at Elev. 1118, the new line almost immediately swings to the east over the Sacramento river and then continues to and through two tunnels to another crossing of the Sacramento river, at Elev. 1134. From this point, the line rises on a grade of 0.5 per cent maximum to a summit at Elev. 1162, and then drops on a maximum 0.7 per cent grade to a crossing of Doney creek at Elev. 1100, and a third crossing of the Sacramento river, at Elev. 1104. From this point, a distance of 6.0 miles from its north end, the line rises on grades varying up to 0.44 per cent to its main summit at Elev. 1218, 100 ft. above and 12.1 miles distant from its starting point, passing through three more tunnels and over crossings of Salt creek and a branch of O'Brien creek.

Immediately south of the summit, the line drops off on a gradient varying up to 0.7 per cent, and, within a

New Scientific Levels Shasta Line Change

construction methods produce non-subsiding ing cuts, will minimize the seasoning period

Careful Routing of the Grading Equipment Was a Large Factor in Securing the Greatest Compaction Where Desired



distance of 3.6 miles, to a crossing of the valley of the Pit river, which will become an important arm of the new reservoir, at Elev. 1104, passing through five more tunnels. At the Pit river, where a double-deck, railway-highway bridge, with its highway and railroad portions, 3,587 and 2,753 ft. long, respectively, and the highest of its kind in the country, is being built, the new line will extend over the lower deck of the bridge on a 0.4 per cent grade downward. Immediately south of the bridge, it extends through two long tunnels and then continues downward through heavy rolling country on a long varying grade of 0.9 per cent maximum to its last crossing of the Sacramento river, at Redding, Cal., and a junction with the old line, at Elev. 559, and 30.1 miles from its starting point.*

Heavy Grading

Traversing rugged mountainous country, grading for the new line was heavy, involving a total of approximately 5,630,500 cu. yd. of excavation, or about 232,000 cu. yd. per mile, exclusive of approximately 490,000 cu. yd. of excavation in the tunnels. A further indication of the extent of the work is seen in the fact that it involved many cuts requiring the excavation of more than 300,000 cu. yd., and numerous fills requiring the placement of an equal amount of material. The cuts range in length up to 1,900 ft., and up to 102 ft. deep on their center lines and as much as 227 ft. on the high sides of slopes, with yardages up to 310,000 cu. yd. Among the many large fills involved, the largest is 1,300 ft. long and 105

ft. in maximum height and required the placement of approximately 400,000 cu. yd. of material.

The materials involved in the grading work varied widely in physical properties, consisting of a variety of rock, shale, gravel and clay. Some of the clay was particularly difficult to handle, varying from a hardpan in dry weather to a soft sticky mud during and following rains. In spite of this condition, the various materials, as is explained later, were alternated, blended, dried out or given added moisture as placed in the fills to produce maximum stability and water-tightness.

General Specifications and Equipment

The specifications to which the line has been constructed called for a minimum base width in cuts of 24 ft., with an additional 1½ ft. on the outside of curves. Side slopes of cuts were generally made 1 to 1 in earth, and as little as ½ to 1 in stable rock, although this was varied with conditions, being determined at each location on the basis of the character of the material encountered, side slopes on the fills were generally made 1½ to 1, with 1¾ to 1 for rock fills. Where cuts are more than 60 ft. in height, it was the general practice to provide berms at the 60-ft. level, 16 ft. in width, although where additional filling material was required out of these deeper cuts, berms were provided in some cases at 20-ft. levels, as is pointed out later. Fills were constructed with a minimum top width of 20 ft., with an additional width equal to at least 10 per cent of their height, and where the toes of fills extended below the maximum proposed high-water level in the reservoir area, special care was taken in their construction, as is also described later.

Throughout the grading operations, which were car-

* For a more detailed description of the various features of the line re-location, including operating features, tunnels, bridges, etc., see the *Railway Age* of June 22, 1940, page 1108, and June 14, 1941, page 1054.

ried out under contract in five major sections, the most up-to-date, large-capacity grading equipment was employed, this including as many as 20 to 25 earth-moving carryalls of 18 to 32 yd. capacity, 20 to 25 93-hp. hauling tractors, 15 93-hp. bulldozer-equipped tractors, 8 heavy-duty rooters, several tractor-mounted rock rakes, one 2½-yd. Northwest shovel, one 2-yd. Bucyrus-Erie shovel, one 2½-yd. Northwest dragline, one 2½-yd. Lima shovel-dragline-crane, six sheepfoot rollers, and five or six water tank sprinklers.

With this equipment, rapid progress was made throughout the grading work, as is seen by the fact that as much as 526,000 cu. yd. of material was moved during peak months.

Scientific Soil Methods Employed

Interesting and effective as were the earth-moving operations themselves, the most striking phase of the grading work was the highly scientific manner in which it was carried out, every phase of the work being covered by specifications and done under the immediate supervision of a corps of trained earthwork inspectors of the Bureau of Reclamation, directed by a principal earthwork inspector under the chief inspector. Upon the premise that the most water-tight and stable fills can be obtained only by properly anchoring them to the original ground, and by a proper relationship between the character of the materials placed in the fills, their moisture content and the method of compaction employed, specifications for the grading covering all of these details were set up and enforced rigidly.

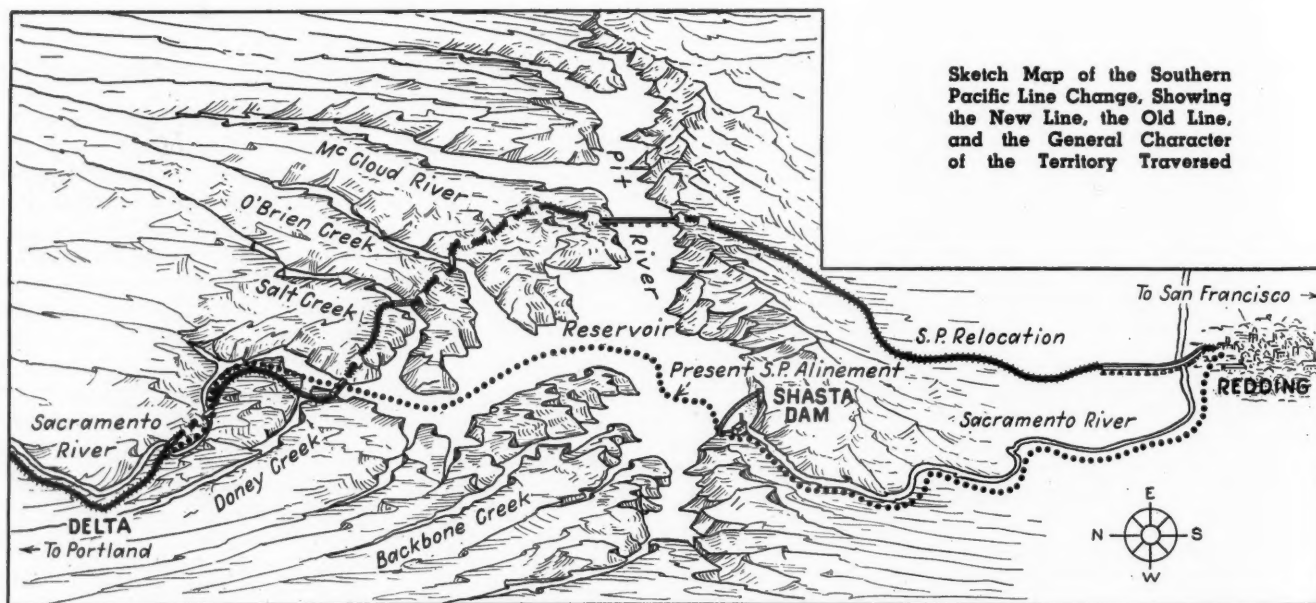
Briefly, the specifications required that where fills are

and cobbles must be well separated to prevent nesting; that no rocks or cobbles more than 8 in. in diameter should be left in the middle third of the embankment; and that where generally coarse material was used in the fill, it must be mixed with finer material spread over it as placed, even going to borrow pits to secure such fine material, if necessary.

Other items of the grading specifications required that the best of materials be used on the tops of embankments for a depth of at least 12 in., and that no cobbles or rocks more than 6 in. in diameter should be placed in the top two feet of fill; that all material be laid down in horizontal layers not exceeding 8 in. in thickness, and spread over the full width of the fill, and that each layer be thoroughly compacted by uniform equipment travel over it before the succeeding layer was placed, sprinkling the fills as necessary to secure the proper moisture content for the degree of compaction required. They also provided against the placing in the fill of material too plastic, that is, with a too high a moisture content, requiring that where such material was used in any layer, it must be allowed to dry out to the moisture content required before being covered with a subsequent layer, or mixed thoroughly with a drier material to bring about a resulting mixture of the proper moisture content to permit satisfactory compaction.

Middle Third of Fills Given Special Attention

In carrying out the requirements of the specifications, many expedients were used, always under the direction of the Bureau's inspectors. For example, the greatest attention was given to securing maximum compaction

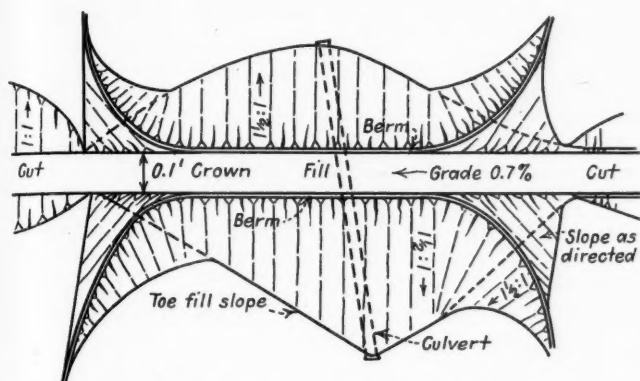


placed on slopes, the original surface must be removed and the underlying stable material stepped in horizontal benches 4 to 12 ft. in width; that on rock slopes, horizontal benches must be blasted; and that even where placed on smooth flat surfaces, the original unsuitable surface material must be removed and the underlying stable material must be deeply plowed to insure intimate bond with the fill material. They also required that fill areas be cleared of all rubbish or brush; that where too much sand in the filling material was likely to prevent compaction, it must be mixed with other binding soils or be rejected; that large clods must be broken up; that rocks

within the middle third of fills, both through the character and moisture content of the materials employed and the method of placing them. To this end, frequently repeated field and laboratory tests were made of the compaction being secured; tractors equipped with rock racks were employed to push rocks and cobbles more than eight inches in diameter out of the middle third of embankment; harrowing equipment was employed where necessary to break up large clods of material or to mix materials of different moisture content; and increased compaction within the middle third was brought about largely by routing the grading equipment so that loads

moved over this third, while empty movements were made over the outer third areas.

Where satisfactory compaction could not be secured because of insufficient moisture content of the material being placed, the additional moisture required was added with wagon tank-type sprinklers. In other cases, to



Sketch of the Earth Fillet Construction Employed at the Junctions of All Sizable Cuts and Fills to Direct Drainage Water Away From the Embankments

secure adequate compaction, especially in the case of rock fills, the sheepfoot rollers were employed for the number of passes required to produce the compaction desired, the operation of this equipment being under specifications which designated specifically the type of roller and knobs, the spacing and weight on individual knobs, and the speed at which the rollers must be operated.

Many Field and Laboratory Tests

Unquestionably, the scientific soil studies that were made on this project, both prior to and during filling operations, were the most extensive and detailed ever carried out in connection with railroad line construction. These studies were predicated upon the knowledge that, regardless of the character of soil involved, the compacted soil that contains the least voids is necessarily the most water-tight and will soften less from water absorption. They were also predicated on the knowledge that the degree of soil density required can be obtained by controlling the design and use of grading and compacting equipment and by placing the correct moisture content in the filling material before it is compacted, with relation to the particular construction equipment employed.

With this fundamental knowledge as a background, the Bureau's representatives on the work made extensive laboratory tests of the widely varying materials involved in the grading, building up weight-moisture-plasticity charts for each of the various materials as a basis for determining the amount of moisture necessary in each class of material to produce, under the compaction methods employed, the density of soil desired in the fills. With this basic knowledge of the moisture content necessary in the various materials to produce the desired compaction, thousands of field check tests were made throughout the grading work to insure that this compaction was being secured.

Windrows and Berms Protect Slopes

Aside from the grading features already pointed out, there were a number of unusual, and in some cases novel, features incorporated in the grading work, primarily in

the interest of appearance and of preventing the washing of cut and fill faces. These features were particularly effective in the territory of the Southern Pacific line change, which has an average annual rainfall of 100 in., or more, with most of it occurring within a period of two to three months. One of them was the consistent practice of the contractors, when constructing the large fills, of maintaining a windrow of material along each side of the embankment as built up, the purpose of these being to prevent side wash during construction from run-off from the top face of the fills. These windrows, thrown up by bulldozers with usually one pass at the close of each day's work, were most effective in this regard, directing surface water to points along the fills where it could be drained off with minimum damage to the side slopes. On fills having a low rock content, this procedure was required by the Bureau.

Another interesting feature of the grading is in connection with the berms provided in the side slopes of all deep cuts. All of these berms, which are 16 ft. wide, instead of being level, are sloped backward away from the center of the cut, and are pitched longitudinally one or both ways to carry all run-off to the ends of the cuts, without any danger of its breaking down over the face at any point.

As stated earlier, these berms were called for at 60-ft. levels in the deeper cuts, but in the interest of appearance and economy in grading, this standard was adjusted to provide them at 20-ft. levels in some of the deeper cuts where it was desirable to take out excessive material for filling operations. A common alternative which might have been adopted was to dish out the faces of



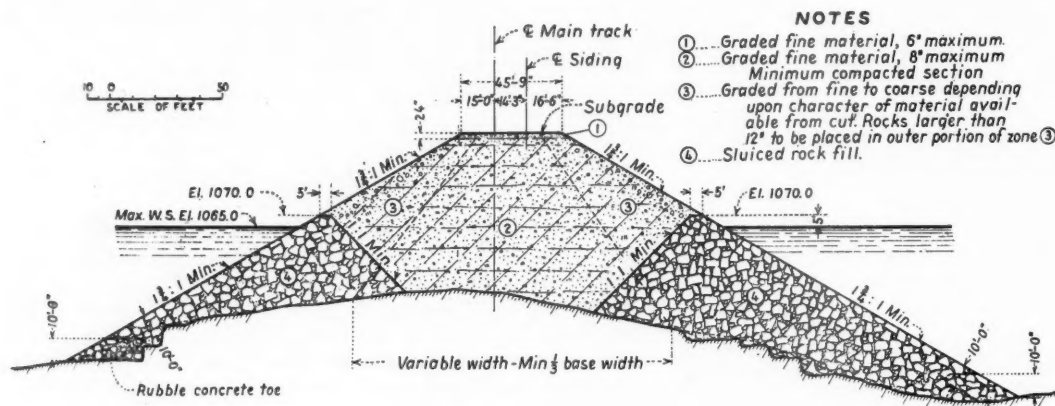
A Section of the Finished Railroad Subgrade. Note Earth Fillets at the Intersections of Cuts and Fills to Prevent Wash

cuts as their height increased, but this practice produces an unsightly appearance and was impractical, compared with the uniform cut width at the ditch level, with successive berms at 60- or 20-ft. levels. In addition, of course, the multiple-berm construction cut down the height of successive 1 to 1 and $1\frac{1}{2}$ to 1 slope faces, with the minimizing effect which this has on face wash.

Still another important innovation in the grading methods was the provision of earth or rock fillets at the points of intersection of cuts and fills, on both sides of

the roadway. These fillets, as shown in the accompanying sketch and one of the accompanying illustrations, are wedge-shaped sections of fill material, so placed and sloped on their top surface as to direct all water from cuts away from the intersecting slopes or toes of adjacent fills. The size, and thus the yardage involved in these fillets, varies with the change in ground level from cut to fill, from a few hundred yards to several thousand

trations, the submersible sections were made up entirely of rock, with all voids filled with gravel and rock spalls, sluiced into position by large-volume hose streams of water. The specifications for these sluiced rock fills required that approximately 50 per cent, by volume, of the fills consist of boulders or broken rock, each unit of which should be at least one cubic yard in volume, with the remaining 50 per cent consisting of small boulders.



NOTES

- ① Graded fine material, 6" maximum.
- ② Graded fine material, 8" maximum.
- ③ Graded from fine to coarse depending upon character of material available from cut. Rocks larger than 12" to be placed in outer portion of zone ③.
- ④ Sluiced rock fill.

Sketch of Typical Fill Construction Where Lower Portion Will Be Submerged in the New Reservoir

yards, although, as constructed, the fillets were varied in size more on the basis of whether the material employed was waste, or had to be provided by pay excavation. But whether large or small, all of the fillets function effectively to steer all drainage water from cuts away from adjacent embankments.

Still another feature of the grading was the provision of longitudinal camber in all fills to compensate for anticipated consolidation after construction, and thus insure that when the fills come to final rest, their subgrades will be at true grade. It is particularly interesting that this feature was incorporated, in view of the fact that through the grading methods employed, it is known that the maximum ultimate consolidation under service of embankments up to 100 ft. in height will rarely exceed 0.5 per cent of the total height.

Sluiced Rock Fills

While great care was exercised in the placing of all fills, as already described, special consideration was given to those sections of embankments that extend below the maximum high water level of the proposed reservoir. In these cases, as shown in one of the accompanying illus-

trations, the submersible sections were made up entirely of rock, with all voids filled with gravel and rock spalls, sluiced into position by large-volume hose streams of water. Other items in the specifications required that the fills be placed in approximately horizontal layers not exceeding five feet in thickness, graded from fine to coarse, with the larger rock or boulders near the outside, 1 3/4 to 1 slope faces, and that only sufficient spalls, rock fragments, gravel and sand be used in the fills to fill the voids in the coarser material, all of which was free draining.

Another feature of these fills is that the toes of most of the rock sections, to a height of 10 ft., are constructed of rubble concrete. Constructed to these specifications, it is evident that wave action cannot damage the main bodies of fills across or along the reservoir area, and, furthermore, that these fills have been assured an unusually large measure of stability against sliding out as the result of their dead weight or super-imposed loads.

Expect Largely Reduced Maintenance Costs

That certain of the studies and special methods of grading employed on the Southern Pacific line relocation added to some extent to the immediate out-of-pocket cost of the grading work, especially for the maintenance of



One of the Multiple-Berm Cuts. Note Sloping of the Berms Transversely and Longitudinally for Drainage

the sizable staff of soil inspectors employed, is not questioned. On the other hand, many of the desirable features of embankment and cut construction, and of the grading methods employed, were effected without any increase in cost, and in some cases, with economy. For example, laying down the fills in layers not exceeding eight inches in depth, involving spreading, worked to the advantage of the grading contractors and, on bid prices after the first, was reflected in lower unit bids. This method involved no longer haul than spot dumping and, on the other hand, speeded up the equipment operation since it eliminated the necessity for the shifting of gears. At the same time, it minimized bulldozer work and always afforded the grading equipment a wide, relatively smooth and level area to turn on.

While the final economies to be effected in reduced cut, roadway and track maintenance during the seasoning period of the new line, as the result of the methods employed, cannot be fully established with any degree of



The Submersible Sections of Fills Were Made Up of Large Rock and Fines, the Latter of Which Were Sluiced Into Position by High-Pressure Hose Streams

accuracy until the seasoning period has progressed for at least a couple of years, it is known definitely that bank wash in cuts and fills will be at a minimum as the result of the precautions taken, and that shrinkage and subsidence of embankments under operation, with its adverse effect upon track maintenance and train operation, will only be a fraction of what could be expected under less careful grading methods.

That this latter fact is true, is indicated unmistakably in the fact that thousands of field tests made in fills show them to have less volume than the same material in its natural state. Fills containing less than 32 per cent rock have showed shrinkages from 1 to 10 per cent in the volume of material as taken from cuts, and swell in the fills rarely exceeding 5 per cent in the highest, which generally involved a higher percentage of rock.

These investigations, as well as all other signs in the behavior of the cuts and fills of the line change, indicate that the scientific methods and special construction features employed will prove more than justified through the reduced costs which will be involved in maintaining the

new line to the standard necessary for a high degree of operating efficiency.

The entire grading work, which has cost in the neighborhood of \$1,750,000, exclusive of all structures, was carried out by the four following contractors under the direction of the Federal Bureau of Reclamation:

Granfield, Farrar & Carlin; United Concrete Pipe & Ralph Bell; R. G. Clifford; and A. Teichert & Sons.

The Central Valley project as a whole, including the Shasta Dam construction and the railroad work, was carried forward under the direction of R. F. Walter, chief engineer of the Bureau of Reclamation, until his death on June 30, 1940, assisted by Ralph Lowry, construction engineer, and R. M. Snell, assistant engineer of the Bureau, in direct charge of the railroad project. Since early in July, 1940, the work as a whole has been under the direction of S. O. Harper, who was appointed chief engineer of the Bureau, to succeed Mr. Walter. The soil studies and grading operation in connection with the railroad project have been carried out under the immediate supervision of C. M. Jackson and H. M. Crowell, chief inspector and principal inspector, respectively, of the Earth Dam Materials Testing Laboratory of the Bureau of Reclamation.

The large interests of the Southern Pacific in the project are in the hands of W. H. Kirkbride, chief engineer, and his staff, represented in the field by J. A. Given, location division engineer, with headquarters at Redding.

Motorists Cost Railroads Millions

DAMAGE to railroad property by motorists is costing the railroads of the country many millions of dollars, according to F. A. Kelly, chief claim adjuster of the Atchison, Topeka & Santa Fe at Los Angeles, Cal., in an address before the fifty-second annual convention of the Association of Railway Claim Agents at Denver, Colo., on June 11-13. The meeting, over which President P. J. Cronin, chief claim agent of the Pennsylvania presided, was attended by more than 150 representatives of the claim departments of the railroads of the United States and Canada.

Newly Elected Officers

Officers elected for the ensuing year are as follows: President, E. W. Sprague, general claim agent of the Illinois Central at Memphis, Tenn., vice-presidents, H. L. Hanson, chief claim agent of the New York Central at New York, C. W. Krohl, general claims attorney of the Chicago, Burlington & Quincy at Chicago and J. C. Mann, district claim agent of the Erie at Buffalo, N. Y.; and secretary-treasurer, reelected, F. L. Johnson, Claim agent of the Alton. Buffalo, N. Y., was selected as the place for the next annual meeting.

In his discussion, Mr. Kelly pointed out that some railroads are being successful in collecting for damages caused railroad property by motorists. "One large railroad," he said, "collected \$168,000 in the ten-year period from 1931 to 1940. In collecting this amount it was necessary in only two instances to file suit and these were both settled before trial. Another railroad collected more than \$25,000 on such claims in 1940."

Among the items of expense which an automobile accident may cause a railroad, Mr. Kelly said, are the following: Flat hourly and mileage charges for the use of wreck

equipment, overhead, delays to traffic, cars demolished, supplies, fuel, lubricants, stores department expense, wages of labor and crews, extra wages of crews delayed, meals of wrecking crews, damage to equipment, loss of its use, rentals of equipment, flattened wheels, supervision, cargo loss, payroll tax, railroad retirement insurance, damage to freight, and loss of good will. The property damage insurance carried by motor vehicle operators he concluded, if any, is frequently insufficient to cover the damage suffered by the railway, and operators should be required to carry larger amounts of insurance. The Interstate Commerce Commission, he said, which has jurisdiction over trucks should raise the present minimum of \$1,000 in property damage insurance.

Safety and safe operation today have more than ever become everybody's business, according to O. F. Gnadinger, supervisor of safety and claim agent of the Elgin, Joliet & Eastern, in a talk on the value of safety work to the claim agent. "When," he said, "I compare early-day with present day conditions and realize that hundreds of lives have been saved and thousands of injuries have been prevented through organized safety, no one can convince me that safety has not been worth while.

"I believe that in their day, safety campaigns and safety contests served a good purpose, but somehow I feel that they have outlived their usefulness. Sometimes I feel much the same about the time-honored slogan 'Safety First.' In the last few years, there has been a distinct change in the attitude towards safety and accident prevention and it has come to be regarded as an important cog in the machinery of railroad operation. One of the reasons for this is that operating officers have come to recognize safety for what it really is—efficiency.

"There are many ways in which claim men can aid in the procuring of efficiency. Claim agents, when their investigations disclose dangerous conditions or practices should make an effort to have the conditions remedied. During their contacts with employees, claim agents should discuss safety."

Amendment to Liability Act Discussed

One of the subjects given special consideration was the 1939 amendment to the Federal Employers' Liability Act and its effects upon legal procedure of the railroads. Discussion revealed many possible interpretations of the language of the amended act that could seriously affect a railroad's liability. A paper by O. G. Browne, general claims attorney of the New York Central at New York, pointed out that it was predicated by counsel at the time the amendments were passed that the vague language was such that it would take a generation of legal decisions to settle the questions that would naturally arise. According to a recent court decision quoted by the paper, it was the intent of Congress to include within the scope of the act, all employees, even those performing intrastate services.

Joseph S. Lafferty, attorney for the Atchison, Topeka & Santa Fe at Chicago, concluded in his address, that the 1939 amendment is not as radical a departure from the principles of the old Federal Act as has sometimes been imagined. A person "in interest" as defined in Section 1 of the Act, he continued, must still prove negligence of the employer, proximate cause and damage in order to recover. The Act continues to cover the same classes of employees and the only change in the coverage rule is that the "tour of duty test" has now been substituted for the "time of injury test" of coverage.

In a paper on Claim Handling in this Streamlined Age, O. F. Ellington, general claim agent of the Texas & Pacific at Dallas, Tex., recommended that the modern

"streamlined" claim agent not burden himself with too much detail. "I think," he said, "we sometimes over-investigate cases and give too much attention to minor cases where nothing of a serious nature will likely develop. Cases should be given the attention their importance indicates. The day of laying a file back on the roll top and saying, 'Well, I'll give that consideration' is about over. There are still some cases you can jockey with, let sleep or give the 'absent' treatment, but most of them are live ones to be disposed of by a settlement or refusal to settle.

"Time and money can be saved, and friends made for your company, by paying promptly when the amount of settlement has been agreed upon."

The program of the meeting provided for addresses on a large number of topics. Among the speakers were Ben F. Stapleton, mayor of Denver, Wilson McCarthy, trustee of the Denver & Rio Grande Western, and J. L. Rice, general attorney of the Colorado & Southern, who highlighted recent high court decisions. Topics discussed included, What the Trial Attorney May Reasonably Expect From the Claim Agent, by Harold A. Smith, trial attorney for Winston, Strawn & Shaw at Chicago; Relation of Trauma to Disease by Casper F. Hagner, M. D., consulting surgeon of the Chicago, Burlington & Quincy at Denver; Advantages of a Seriously Injured Employee Making Settlement Direct With His Employer, by P. C. Garrott, general claim agent of the Baltimore & Ohio at Baltimore, Md.; and Probable Effect of the Railroad Retirement Act on Future Verdicts, by John W. Hudson, trial attorney for Taft, Stettinius & Hollister at Cincinnati, Ohio.

A unique feature of the program was an "I Confess" forum in which selected members described humorous and educational experiences. Participating in the forum were: J. A. Murtaugh, district claim agent of the New York, New Haven & Hartford at Providence, R. I.; W. J. Keown, claim agent of the Illinois Central at Baton Rouge, La.; L. D. Phelan, district adjuster of the Chicago, Milwaukee, St. Paul & Pacific at Aberdeen, S. D.; J. M. Baxter, claim agent of the Southern Pacific at San Francisco, Calif.; and R. O. Carter, claim agent of the Missouri, Kansas & Texas at Dallas, Tex.

Five Nickel-Clad Steel Tank Cars for Chemicals

(Continued from page 1107)

coils are held together by straps and are formed as a cradle to fit the outside tank diameter. The heating is not done while the tank cars are en route but the coils are connected to an outside source when emptying the car at its destination.

The smaller pipes and pipe fittings in the dome head are made of pure nickel while the larger pipes and fittings are lined with pure nickel sheets which have been welded with nickel welding rod. The latter method was used for the large pipe because of the great amount of pure nickel required to make them of this material.

The tanks were annealed in special furnaces, recently built at the Milton plant, before mounting on the trucks. This was done to relieve whatever stresses might have been set up by the welding or forming operations.

For mounting the tanks on the underframe a special type of anchor was developed. This is welded to the steel side of the nickel-clad tank and bolted to the car frame in the center. Specially fashioned wooden cradles support the tanks at both ends.



The "Little Old Red Box Car" Has Assumed Vital Importance in the Nation's Welfare Today

The Urgent Question of Car Supply

Symposium held at convention of American Association of Railroad Superintendents

AS was briefly reported in the June 14 issue of the *Railway Age*, a symposium on the question of car supply and car handling was a feature of the 47th annual meeting of the American Association of Railroad Superintendents in Chicago, on June 4. An address was made by W. C. Kendall, chairman, Car Service division, A. A. R., supplemented by addresses from representatives of the two industries that are perhaps the largest shippers at the present time. H. E. Graham, general traffic manager, Jones & Laughlin Steel Company, Pittsburgh, Pa., represented the steel industry, and Lawrence Farlow, secretary, Farmers Grain Dealers Association, Bloomington, Ill., spoke on the problems of grain car supply.

The Superintendent's Responsibility

Chairman A. F. McSweeney, superintendent freight transportation, Pennsylvania, Chicago, presented a committee report on the superintendent's responsibility for cars as follows:

"A superintendent has a direct responsibility in the proper handling of cars, both loaded and empty. He should see that his staff is properly instructed as to car service rules, and their observance; also such information as to the car requirements of industries on his division, and that proper switching is programmed to avoid delays. He and his staff should make periodic checks at terminals and at local stations to see that cars are moved promptly after release and forwarded to points of loading. He should see that surplus equipment is promptly reported to the system or regional car distributor, to permit him to program its movement to a connecting division or return to owner line.

"Where a division has a heavy interchange of equipment to connecting lines, he should program these deliveries prior to 11:59 p. m., whenever possible, to eliminate an additional day's per diem, instead of having

this set up on the basis of delivery of cars shortly after midnight. Most of us when speaking of per diem, think in terms of one dollar per car per day, whereas a recent study indicates that during close car supply, when we fail to provide equipment and the traffic is diverted to other transportation agencies, the loss to the railroad in revenue amounts to \$7 per day per car, instead of only one dollar.

"This year, the superintendent has a more direct responsibility than at any time in the past ten years, due to the anticipated heavy loading brought about by the defense program. A recommended plan of action follows:

1. The initial step toward the maintenance of an adequate car supply is a survey on the part of the superintendent to determine the shipper's requirements in his territory, and the availability of empty freight equipment by release from lading, receipts from connections and the trend of empty car movement.
2. Assign an experienced man whose sole responsibility shall be the speeding up of movement and handling of freight equipment.
3. See that company material is handled currently and loading confined, if possible, to cars not in active demand or equipment in inferior mechanical condition.
4. Obtain the maximum in car loadings, l. c. l. and carload.
5. Avoid the use of first-class equipment for loading commodities that could be safely transported in second or third-class cars.
6. Maintain close check of loaded cars at points where equipment shows indications of being unduly delayed in release or reconsignment.
7. When business conditions warrant, co-operation of shippers and consignees should be solicited to insure the prompt loading and unloading of cars.
8. Delays to empty freight equipment for so-called prospective loading should be avoided wherever possible by the protection of shippers' needs from normal empty movements, either in blocks or train lots.
9. Shop tracks should be shifted daily to permit the application

- of repaired cars on existing orders, and the placement of equipment for necessary shop attention.
10. Give special attention to cars moving en route unaccompanied by revenue billing or card bills, to obtain proper data for disposal without delay.
 11. Set up necessary and proper inspections at terminals to prevent cars failing mechanically en route.
 12. Short-route foreign lines' equipment where such action will insure the return of car to owner expeditiously. In all cases loading foreign lines cars in accordance with car service rules, where suitable loading is available.
 13. Program the handling of empty equipment to minimize delay during week-end periods.

Handling L. C. L. Traffic

The committee recommended the following for efficient l. c. l. handling:

Close supervision at loading point to avoid utilization of more than one car for a specific destination, involving: Proper stowing. Avoid starting additional car when heavy tonnage is left in car not handled. Review authorized loading currently with view to eliminating lightly loaded cars. Consolidation of connecting line cars via junction points to which local cars are also represented, segregating tonnage in end-and-end of car. Cars authorized for representation to two or more points off line to be reviewed from the standpoint of concentration. Service schedules to be given full consideration. Supervise the holding of cars where existing schedules provide for destination arrival on Sunday when stations are not working and cars will not be handled until Monday. Two-day schedule cars on Friday to be held for Saturday loading. Three-day schedule, hold Thursday cars for Friday loading. Stowing to be carefully supervised to avoid utilization of overflow equipment. Avoid delay to merchandise cars by having waybills and other documents on hand at unloading station with, or in advance, of the car, and every "no bill" case to be run down to a conclusion and proper corrective action taken. Minimize terminal time in placement of both l. c. l. traffic and carloads, so as to secure early release of cars.

W. C. Kendall's Address

W. C. Kendall, chairman, Car Service division, A. A. R., spoke on the subject "Meeting Today's Demand for Cars," as follows:

"The elimination of all waste incident to car handling is important. The national defense program demands the utmost in effort. To meet these demands, railroads must find ways of increasing the efficiency of freight transportation. Each of us can make a generous contribution toward these results by closer attention to opportunities which are before us every day. If the cycle of movement of all cars from one loading to the next can be reduced by one day, the equivalent of 100,000 cars can be saved. Further, if the traffic volume of the country could be loaded one ton heavier per car, 40,000 less cars would be needed by the railroads to meet requirements for the present level of business. The attainments of both these goals would mean a saving of about 500 million dollars in capital account, and 15 million dollars in interest charges. The saving of 1,750,000 wasted car days, which is easily practicable, will save the vast expenditures referred to for capital account and interest charges.

"Car ownership of each railroad should bear a proper relationship to the ownership of every other railroad if cars are to be handled with the greatest economy and in a manner to render the best service to the public. It is believed there was such a relationship, or at least as

close as it is practical to obtain, in 1929. Since then, due mainly to economic causes, ownership by individual railroads has become somewhat unbalanced. Attempts are now being made to bring about an improvement in this situation. Balanced ownership of individual roads is important for it means that the combined ownership of all roads can then be used with the greatest economy to all. The common rules upholding the rights of ownership can be respected. Confiscation and misuse become unnecessary.

"All directly concerned with car handling are familiar with the meaning and intent of car service rules. These rules presuppose that every railroad shall respect the ownership of every foreign car on its rails, and that railroads shall use each such car to its own best advantage consistent with the rights of its owner. The rules also presuppose that the rights of a neighbor railroad shall be respected and not be imposed upon by forcing upon them uneconomical practices in car handling. A survey, perhaps revised annually, will indicate to each railroad the number of cars, by types, it will require to provide for the shipments it normally originates, supplementing such ownership with the cars released on its line, or moving over its line empty, which may be used for loading without doing violence to the rights of such ownerships. Requirements for loading on dependent short lines, and for industrial loading in switching territory, when such railroad is to receive the road haul, should always be taken into consideration. Unfortunately this is too frequently not the case, and much difficulty and confusion results.

"Today's demands for cars are on a different basis than they used to be. Where could one find, in former years, the prototype of the modern covered hopper now extensively used, the long gondola, the 10-ft. 6-in. high inside box car, the automobile device equipped car, the car with perforated linings? In meeting the ever-increasing demands of the shipper for special services of one kind and another, these newer types of cars have been provided at great expense and generally without added compensation. The freight car is no longer just a car, it has in large measure become a specialty, and must be handled accordingly. The problem of economy in movement is thereby increased. Whatever has been responsible for these changes, they must be accepted. The conditions they have brought about in the matter of more costly operation must be met by new methods of attack. While we are still in the business of transportation, other agencies with like purposes are rising on all sides, and this competition must be met fairly and constructively.

"Meeting today's demands for cars has taken on a different, and an altogether more important, meaning in recent weeks. With each day comes some new demand with respect to car supply. There probably has never been a time when the problems relating to car handling were as varied as they are today. Six months ago the forecasters were prophesying a 9.4 per cent increase in car loadings in 1941. They could not then reckon with conditions which later arose. Subsequent revision raised this forecast to 12.5 per cent. For the year 1941 to date, the increase in loading volume over that of 1940 is 16.1 per cent. To what heights is it destined to reach? No one knows. Whatever it may be, it will require all the ingenuity we can bring to bear.

"The Car Service division has been making some comprehensive surveys recently to determine, if possible, the extent to which slack in car performance may exist, and what is necessary, and possible for its elimination. The results of these surveys are not altogether complimentary to us as operating officers who have felt a certain pride in thinking that we were doing our job well. Permit me

to give you some examples, taken at random, which point directly to the poor job we are doing, and which must be corrected if our pledge of loyalty to the cause we have in mind is to take on real meaning:

"A road, receiving three loads for every one it delivers off line, was found holding cars, scores of them, 8 and 10 days for prospective loading, when cars are being released daily which might be made available. Duplicate merchandise cars being loaded day after day from one station to far distant points via competing routes beyond the loading line, with light tonnage in each car. Other cases of daily cars running to long distances with 1,000 lb. and less. About 40 per cent of all box car loading is in I. C. I. service, furnishing a fine opportunity for intensive supervision which should result in conservation of equipment.

"At large points, particularly where competition between railroads exists, it is the practice of serving roads to make cars available to industry for prospective loading far beyond their daily requirements. As examples, at one point, one road held 38 cars from 3 to 23 days, at another 25 cars 4 to 10 days, at another 14 foreign cars 6 days, and then sent them home empty. This occurred on a road which considered it had a tight car supply. A terminal road, held 8 cars 131 days for loading.

"A frequent source of criticism from shippers relates to the urge placed upon them to load and unload cars promptly, and then find that railroads fail to switch cars, allowing them to remain on industry tracks two and three days awaiting railroad convenience. This criticism is justified. A somewhat parallel situation is when yards fail to switch out and place cars consigned to industry tracks promptly on arrival. The practice has grown increasingly of permitting industry to retain cars foreign to the delivery road in their possession for intra-plant use for indefinite periods. Sometimes up to one year. In one case 52 cars were detained in one plant 682 days. Rules provide that serviceable cars shall not be assigned for intra-plant use except during periods of surplus, and foreign cars shall not be so assigned at any time. The case is probably rare when cars unserviceable for any road haul traffic cannot, upon prior arrangement, be made available for any necessary intra-plant use, thus releasing serviceable equipment for the purpose for which it was intended.

"Delays to revenue cars under load with company material, other than coal, are common to most roads. In one case not long ago, a road reported an average detention of over 100 days per car to a large number of cars. In another instance, 56 cars had been held under load for a total of 2,239 days, 18 of them from 40 to 200 days each. This road reported difficulty at times in meeting its daily need for equipment for loading by the industries it served. Of special interest to superintendents should be the many instances uncovered when there is delay in switching out blocks of cars received in road haul service or in interchange. These delays run up to 72 hours and over. They indicate lack of supervision, or power, or perhaps both. A delay of 48 hr. in switching out 500 cars received in interchange in a four-day period means close to \$1,000 in per diem costs, which would pay for a lot of supervision, as well as yard power. Perhaps you as an officer should not have been too critical of a little overtime for a yard crew.

"These are all actual examples, and are cited so we may take them home in our minds and see if such things exist within our own jurisdiction. The experience of the Car Service division teaches that no one should be too sure as to what is going on in the matter of car waste, almost under one's eyes. Have you checked repair tracks recently to see how many light repair cars

lay for a day or more beyond the time necessary to restore them to service?

"It will pay big dividends to examine the loading at larger industries and point out the number of opportunities there are for loading two, four, five, yes, ten or more, tons additional in each car forwarded. Trade units are sometimes presented as barriers. Additional expense of loading may be offered as an excuse for under loaded cars. But this resistance can be broken down by pointing out the necessity under present conditions of helping some neighbor shipper to an improved car supply when such co-operation will help. Within recent years the five-day work week has been made effective in many industries. With the press for cars, such industries should be requested to arrange for loading or unloading on a basis of six days. As traffic volume increases it will be necessary that any accumulations or threatened congestions, no matter how inconsequential they may seem, be promptly spotted and demand made upon consignees to release equipment under load. Railroads have not provided cars to be used as warehouses.

"Questions are being raised, sometimes in high places, as to the ability of the railroads to provide for the traffic load which is anticipated during the next few months. Judging from experiences in the past, and using the same measuring stick which has so frequently proved reliable, the demands will be met, provided we have that full complement of co-operation so faithfully and generously extended in the past by shippers and receivers, in the various ways well known to them by which they can be helpful; and also provided that the railroads themselves determine that they will eliminate all delays and other wastes.

"The railroads are making a splendid record in maintaining a low percentage of cars in bad order. The number of cars now awaiting repairs is the lowest of record. This fact, with the new equipment which has been added in recent months, together with the new cars which continue to flow from car builders, will provide the maximum possible of serviceable cars for the period of heavy loading. We should all make up our minds to do just a little better than we have ever before. With that performance, the shippers' needs will be met with reasonable satisfaction.

The Steel Industry's Needs

H. E. Graham, general traffic manager, Jones & Laughlin Steel Company, Pittsburgh, Pa., spoke on the subject "Needs of the Steel Industry in Car Supply," as follows:

"All raw material items entering into the making of steel such as ore, coal, coke and limestone (which come to us in hopper cars), and also certain finished items such as rails, plates, rods and structural steel moving outbound in gondola cars, nevertheless, the ever-changing types of steel make for more and more outbound box car loadings. Alloy steels, wire products, tin plate, cold rolled products, all must be afforded weather protection. This of course means a complete change-over in our railway equipment needs, the hopper cars going back to the carriers empty, not being suitable for our finished products. About 70 per cent of our outbound tonnage is loaded in gondola cars and 30 per cent in box cars.

"The ever-changing methods of production are of course brought about by modernization of mills and one of the outgrowths of the continuous mill is the rolling of sheets and strips in long lengths. In many instances, this strip and sheet tonnage is coiled, and when it has passed through the cold-rolled and other processes, it must be protected from the elements in shipping. These

coils weigh up to eight tons each and with an average width of coil 27 in. to 30 in. Such a load placed on the floor of the ordinary box car gives you pretty much of an overload. To get a coil of this weight into a box car requires the use of an extremely large and heavy tractor which requires plenty of room to enter the car and calls for at least 10-ft. side doors. This means extra strong floors are needed, not only to permit the movement of the loaded tractor into car, but to carry the floor load as well. When one of these coils is spotted in the car, you have a concentrated load of eight tons on from 4 to 6 sq. ft. of floor space, and in certain instances we have had coils break through car floors and drop completely out of cars. We, therefore, recommend that all railroads give consideration to these heavy steel loads when designing new or reconditioning old box cars. Many of the eastern carriers serving the steel industry have already re-designed their box car equipment, adding struts and braces to their underframes. Also keep in mind the need of wide doors to enable heavy loading by modern tractors and cranes.

"The railroads should give serious thought to the matter of roofed gondola cars. The steel industry alone spends hundreds of thousands of dollars annually protecting its products against the elements for gondola car loading. Most of the larger consumers of steel cannot handle heavy lifts except by overhead crane, thus requiring gondola car loading. Several roofed gondola cars have already been designed. One type has a roof removable in sections, another has a sectional roof of the telescope type, and a third has a hinged roof that remains permanently attached to the car.

"The steel industry as a whole is inclined to heavy loading. When we have unlimited amounts of tonnage to ship and no limit put on us as to minimum carload weights, we can do a right good job. Last year the Jones & Laughlin Steel Corporation shipped 9,431 carloads of steel for export, and the average loading was 48 net tons per car. Recently we had a movement of 127 carloads of pipe for export via Seattle, on which we averaged 65 net tons per car. On skelp shipments moving for cargo lot loadings, we average better than 53 net tons per car. But all these high tonnage loadings can only be attained where we have complete control of the movement. The steel industry as a whole does a good job of loading and dispatching. The A. A. R. recently announced the average of all freight cars was 22 loads a year. Coal and Ore Bureau figures show that a car kept continuously in the ore service, will make a round trip, from the lower lake docks to the steel plants in Pittsburgh territory, loaded and returned to the dock empty, in 5 days, and when southbound with ore and a return load of coal, in 12 days. This would mean 73 loads per year per car when loaded one way only, and 60 loads per year when loaded in both directions, and the average carload of ore runs well over 70 tons per car.

"Our railroad friends are the worst offenders when it comes to obtaining heavy loadings. They invariably tell us on the face of their orders to ship in minimum carload lots. That means pulling down our carloadings to 20 net tons in most cases, and occasionally to 18 tons. Then they stamp on the face of the order 'Ship only in cars owned by this Company.' That immediately throws a hardship on the producer, particularly when the plant is located many miles away from that carrier. The real advantage, I presume, in having your material come to you in a car owned by your railroad, is the avoidance of per diem, and that in reality means that you want the tonnage on your railroad in your own car so that you can delay the unloading to suit your convenience. That's not helping the car supply.

"You operating men have everything to do with the careful operation of trains and by and large you do a grand job, but we still have damages occurring to our shipments—loads shifting even though we tie them down by the most modern methods known. Our greatest difficulty seems to be with tin plate and sheet shipments, and although we spend anywhere from \$18 to \$24 per car in preparing it for rough handling, nevertheless the load is torn completely loose at times and damaged seriously. Our investigations in most cases show the damage occurring in hump yards, and this is proved by the use of clocks or recorders. If you can overcome this matter of damaging our steel shipments, you will have gone a long way towards doing a good deed not only for your railroads, but for the shipping public as well."

Grain Loadings

Lawrence Farlow, secretary, Farmers Grain Dealers Association, Bloomington, Ill., described the current car supply needs of the grain trade, as follows:

"The American grain trade as now owned and operated in this country has for a decade provided the most efficient commodity distribution system the world has ever known. But in spite of this fine record, both the grain and railway industries are now on trial. There is a strong political element in this country which favors the ownership and operation of such industries as ours by the government. They are viewing our performance in this emergency period with critical eyes. Any indication of inability to meet the emergency would be a welcome excuse to take over. Your industry and ours can, must and will prove that private industry as carried on in this country can cope with any emergency situation with a high degree of efficiency.

"Currently, we are faced with the problem of handling one of the largest winter wheat crops ever produced in this country. This requires the most complete organization of equipment and facilities ever attempted. At Amarillo, Enid, Kansas City, Chicago, Omaha, St. Louis, and other places, committees have been set up to plan for the winter wheat movement. The winter wheat crop is estimated at 653 million bushels compared with 589 million bushels last year and 569 million bushels for the previous 10-year average. The increase over last year is about 10 per cent for the entire country. This increased production comes on top of a carryover of approximately 400 million bushels, which plugs up much of the terminal elevator space that is usually available for the new crop. Therefore, the problem is two-fold: first, to find cars to move the crops as fast as delivered from the combines, and second, to find elevator storage space to permit the prompt unloading of such cars.

"Estimated production, in million bushels, in the surplus wheat producing states is shown in the table.

"It will be noted that the principal abnormal production is in the southwest area including Kansas, Oklahoma and Texas. The increase in that area is about 30 per cent, or approximately 60 million bushels. The Pacific Coast states, Washington, Oregon and California, have an increase of about 20 million bushels. The production for the balance of the country is below normal, so the real problem is in the southwest. In the mid-west territory demands will not be as great as in previous years.

"It now appears that Commodity Credit Corporation will offer loans to farmers on a basis higher than the prevailing market price. If that is the situation at harvest time, then the majority of the farmers will want to have their wheat forwarded to a terminal elevator where a warehouse receipt can be provided to facilitate such a loan. This will complicate the problem to a certain

extent, since the flour mills in the wheat territory prefer to reserve their storage space for free wheat which can be used for milling when needed. It is the country elevator which is charged with the responsibility of stopping

to prove to all government agencies, as you have already proven to our industry, that you are capable of doing a big job and doing it well."

	Estimated 1941	Production 1940	Average 1930-1939
Kansas	165	123	131
Oklahoma	62	56	47
Texas	47	29	31
Washington	43	26	24
Ohio	40	42	40
Illinois	32	39	36
Indiana	31	30	30
Nebraska	30	33	41
Montana	22	19	10
Pennsylvania	19	18	19
Missouri	17	31	26
Michigan	16	17	16
Colorado	15	10	9
Idaho	14	16	13
Oregon	15	12	12
California	12	11	12
Total for winter wheat states.....	580	512	497
All other states	73	77	72
Total United States	653	589	569

the farmer's combine when the flow of wheat is interrupted at any point in the channel of movement. When a delay in movement results from a car shortage at any station, the information is passed on to our office and we in turn report the situation to the interested carriers and to the district manager of the car service division.

"We approach this wheat harvest with confidence that you will be able to maintain your record of service within a reasonable degree of tolerance. Our industry has a very definite reason for wanting you to come up to all reasonable expectations. We expect to co-operate with you 100 per cent to that end. Many an industry can remember the period of government operation of the railroads during the previous World War and in the years immediately following before the roads were returned to the owners.

"In looking through my files a few days ago, I ran across a trade bulletin put out by our Association back in 1920. This bulletin had a paragraph captioned 'Transportation Service.' Under that caption there was this simple statement, 'There ain't no such animal.' That tells the whole story of transportation as we knew it and felt it during that period. Many of our members suffered severe business losses as a result of inability to secure cars to fill their commitments on grain sales. The situation began to improve immediately after the roads were returned to private operation. Since the organization of the shippers advisory boards in 1924 and 1925, none of our members have ever suffered any serious delay for want of cars. In this emergency we want you

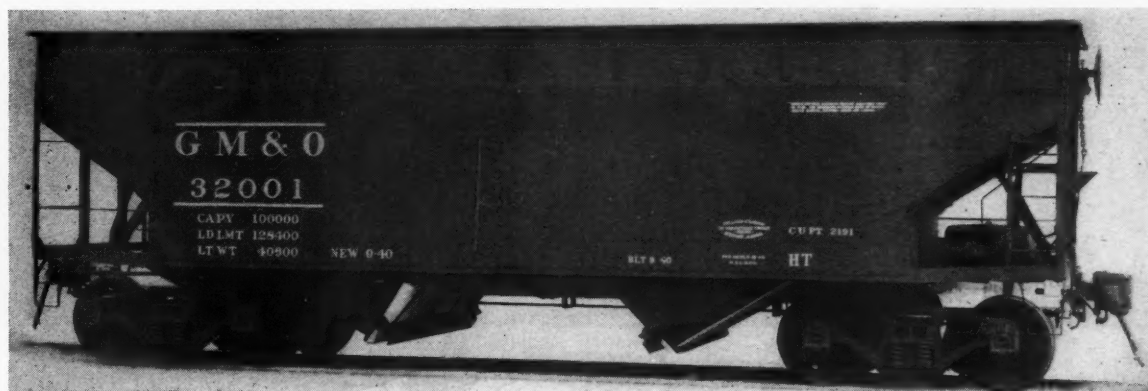
A. N. Williams Leaves Lehigh Valley to Head Western Union

(Continued from page 1105)

and hamlet, its new president will have unusual opportunity to observe the national life in its entirety,—an opportunity not presented to executives of individual railroad properties. The utility engages in a wide field of business and personal services ranging from "singing telegrams" to ticker services in investment houses.

Mr. Williams was born in Denver, Colo., on June 14, 1888. He first entered railway service in 1906 as rodman with the Denver, North Western & Pacific (now Denver & Salt Lake) during his summer vacation from study at Yale University, and during the summer of 1907 served as a machinist's apprentice with the Denver & Rio Grande (now D. & R. G. W.). In 1910 he was graduated from the Sheffield Scientific School, Yale University. After graduation he served with the Union Pacific as brakeman, section foreman, extra gang foreman, time-keeper and other "orientation" positions until May, 1912, when he became inspector of equipment with the same road. Three months later he became trainmaster and superintendent with the Missouri, Kansas & Texas. In 1914 he became trainmaster of the Chicago, Rock Island & Pacific, returning to his old post as trainmaster of the Missouri, Kansas & Texas in 1916. Mr. Williams left railroad service temporarily in March, 1917, to engage in the petroleum industry at various points in the United States and Mexico. He returned to railway service in 1921 as assistant general manager of the Midland Valley, and a year later, took over the general managership of the same road. In March, 1926, he became special representative in the office of President Jaffray of the Minneapolis, St. Paul & Sault Ste. Marie, where he was engaged in special assignments. In March, 1927, he became general superintendent of the road. Five years later in March, 1932, Mr. Williams was elected president and general manager of the Chicago & Western Indiana and the Belt Railway of Chicago, which positions he retained until his election as executive vice-president and chairman of the board of the Lehigh Valley, effective August 1, 1939. One-half year later in January 16, 1940, he was elected president of the road, succeeding the late D. J. Kerr.

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A 50-Ton Steel Hopper Car Built by Pullman-Standard Car Manufacturing Company

Harriman Awards Made

THE Norfolk & Western, the Ann Arbor and the Missouri-Illinois chalked up top-ranking safety records of the country's railroads in 1940 in each of their respective classes, according to findings of the committee of awards of the E. H. Harriman Memorial Medals, made public at a luncheon in the Yale Club, New York, on June 17.

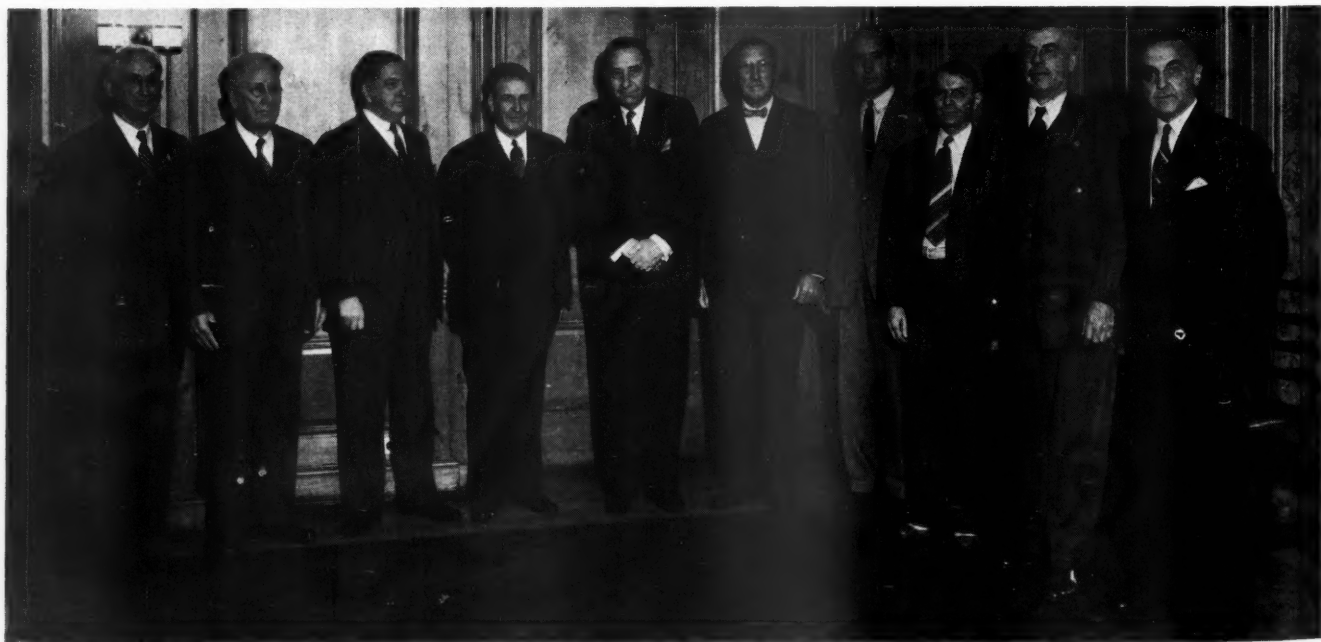
The Norfolk & Western received the gold medal Harriman award for the best 1940 safety performance of roads in Group A (operating 10,000,000 locomotive-miles or more per year); the Ann Arbor received the silver medal for the best showing among Group B roads (operating between 1,000,000 and 10,000,000 locomotive-miles annually) while the Missouri-Illinois was awarded the bronze medal for roads in Group C (operating less than 1,000,000 locomotive-miles.) The awards were received by President W. J. Jenks for the Norfolk & Western; by General Superintendent V. Parvin for the Ann Arbor and by Assistant General Manager R. C. White for the Missouri-Illinois.

These awards are made each year by the American Museum of Safety on behalf of W. A. and E. R. Harriman, sons of the late E. H. Harriman, who are perpetuating the annual donation of the award founded in 1913 by the late Mrs. Mary W. Harriman in memory of her husband. Colonel John Stilwell, president of the American Museum of Safety, presided at the luncheon. The presentation of the medals was made by Judge R. V. Fletcher, vice-president and general counsel of the Association of American Railroads, who is chairman of the Committee of Award. Other members of the committee are F. D. Underwood, former president of the Erie; B. F. Fairless, president, United States Steel Corporation; S. O. Dunn, editor of *Railway Age*; Frank McManamy, former Interstate Commerce Commissioner; and Lew R. Palmer, conservation engineer, Equitable Life Assurance of the U. S., and secretary of the committee."

In his opening remarks Colonel Stilwell reviewed the progress the carriers made in safety in the last 20 years in spite of the fact that the average freight train today moves 62 per cent faster, carries one-third more cars and produces 92 per cent more ton-miles than in 1920. Accidents have been reduced to an amazing degree since 1923—the year before the railroads started their organized safety program—when train accidents per million locomotive miles averaged more than 15; in 1940, the average was less than $5\frac{1}{2}$ or a reduction of 64 per cent. Touching on other measurements of progress the speaker pointed out that passengers were three times as safe during the last ten years as they were in the 'twenties; six times as safe as compared with 1910 to 1919 and 14 times safer than in the first ten years of the century.

Guest speaker at the luncheon was J. G. Luhrsen, executive secretary and treasurer, Railway Labor Executives Association, and for 20 years president of the American Train Dispatchers Association. His discourse, which was chiefly on the effect of the national defense effort on safety, emphasized the necessity of avoiding hurry and strain, which are to the detriment of safety. He has found growing evidence of improper flagging as a cause of accidents, and claimed that "too many railroads are placing a reliance in flag protection by the use of train orders issued by the train dispatcher far removed from the point where actual flagging may be necessary." Said he: "Once a certain habit is formed based upon previous protection offered other than by actual manual flag, you foster a neglect, which would be materially reduced if no modification of any kind for flagging was ever substituted." Mr. Luhrsen also expressed strong opposition to the current suggestion for substitution of wood for steel in freight cars to meet the national emergency. Such a move, he said, would be a backward step as far as safety is concerned and in addition the outlay for such equipment "will represent waste when the national emergency is ended." Speaking of waterway proposals the speaker said that the continued

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Principals at Harriman Awards Luncheon

Left to right: L. R. Palmer, secretary, Harriman Award Committee; C. F. Larson, superintendent of safety, Missouri Pacific; R. C. White, assistant general manager, Missouri Pacific; W. J. Patterson, member of Interstate Commerce Commission; R. V. Fletcher, chairman, Harriman Award Committee; W. J. Jenks, president, Norfolk & Western; E. R. Harriman, director, Union Pacific and co-sponsor of the Awards; V. Parvin, general superintendent, Ann Arbor; D. G. Phillips, superintendent of safety, Wabash; and Col. John Stilwell, president, American Museum of Safety.

Freight Claim Agents Support Defense Program

Damage to material in transit delays defense, and gets special consideration at meeting in Denver

"ALL-OUT" aid to guard against transportation delay and damage to material vital to defense was pledged by members of the Freight Claim Division of the Association of American Railroads at their annual session at Denver, Colo., on June 10-12. In the pledge, which was telegraphed to President Roosevelt, the Rt. Hon. W. L. Mackenzie King, Prime Minister of the Dominion of Canada, and General Manuel Avila Camacho, President of the Republic of Mexico, the members promised "to do our part to make the transportation systems of the North American continent useful and efficient through the reduction of freight loss and damage to the irreducible minimum."

The effect of a reduction of freight loss and damage, it was pointed out, will be the elimination of delay to defense projects caused when material is lost or damaged while in transit. Since both shipper and carrier share the responsibility for loss and damage, plans are being formulated for greater supervision in all phases of freight handling from the shipping room to the receiving room. In addition, special studies are being made of loading methods to apply to the many articles to be used in national defense. Typical of the problems confronting the railroads, it was disclosed, was a recent shipment of a casting to the shell loading plant which the government is constructing at Elwood, Ill. The casting, vital to the water supply upon which the completion of the plant depends, was loaded by the shipper with inadequate bracing. As a result, the casting arrived broken and the completion of the plant was delayed ten weeks while another casting was being fabricated. Other problems which will be studied are rough handling of cars, which causes damage to equipment and loading, and circuitous routings of freight, which increase the chances for damage and tie up cars for long periods of time.

Defense Aid Permeated Entire Docket

The importance of railroads to national defense and the determination of members to insure adequate transportation permeated all deliberations during the three-day meeting over which Chairman Parks C. Archer, general claim agent of the Alton, presided. Because of this determination, representatives of other divisions of the A. A. R. were invited to take part in the program. Some of these representatives and officers of the Freight Claim Division broadcasted on behalf of the railroads, over the five radio stations in Denver on special educational programs which totaled two and one-half hours.

Officers elected for the ensuing year are as follows: Chairman, A. E. Pasman, freight claim agent of the Erie at Cleveland, Ohio; first vice-chairman, C. D. Hart, assistant general claim agent of the Atchison, Topeka & Santa Fe at Topeka, Kans., and second vice-chairman, James J. McManus, freight claim agent of the Northern Pacific at St. Paul, Minn. Chicago was selected as the place for the next annual session.

The handling of large volumes of explosives and other dangerous articles in the near future was given special consideration during the report of the Committee on the Prevention of Loss and Damage. "The regulations applying to the transportation of explosives and other dangerous articles are specific and mandatory," the report stated. "It is of the utmost importance in the present emergency that all employees having anything to do with such handling be familiar with the rules, and that supervising officers also understand them and see that they are enforced."

An analysis of 43 "near accidents" in cars containing 26,950 lb. of dynamite and trinitrotoluol in 1940 showed that railroads were responsible for 60 per cent of the causes—since 14 cars were rough-handled or had defective bracing, 2 were in collisions, 8 did not have the dividing partition recommended and 2 had bulkheads that were not rigid. When the cars were opened, 155 mm. shells, and hand grenades, were out of their boxes and on the floor. In one car, 6-in. incendiary shells were projecting through the floor. To indicate that a large amount of explosives will soon be transported, it was reported that several shell loading plants will soon be in operation, among which will be one at Chicago that will ship 50 carloads of shells a day. It was anticipated that the record of 55,000 cars of explosives handled in one day during the World War will be exceeded when all shell loading plants are in operation.

Another subject of importance to the prevention of damage to freight was equipment. "It is gratifying," the report of the committee stated, "to note the large increase in the percentage of modern, well-designed box cars."

As of January 1 this year approximately 78 per cent of all box cars owned by American railroads were of either all-steel or steel frame construction of modern design. An increasingly large percentage of these cars is equipped with devices for controlling vertical shocks and with modern, certified draft gears. These devices protect the car and its lading from vertical shock due to harmonic action of truck springs and end shocks due to slack action in trains or occurring in switching. A number of railroads have also equipped a considerable number of high class merchandise cars with trucks designed to protect lading against vertical shock at very high speeds."

Because about 200,000 cars between the ages of 26 and 28 years will again see service, caution in the repair of old cars to prevent costly wrecks was recommended by W. H. Sagstetter, chief mechanical officer of the Denver & Rio Grande Western. He said that during a recent repair program of old cars undertaken by the D. & R. G. W., magnaflux examination revealed many defective parts.

During the first five months of this year, 579 old cars were examined so that a complete job of overhauling could be done. Of 2,316 truck sides and 1,158 bolsters heated to a temperature of 1,500 deg. and

examined, 627 truck sides and 378 bolsters, or 29 and 32 per cent respectively, were scrapped.

Adequate training and supervision of new help that is being added to train crews and platform forces was stressed. It was reported that 150,000 new men had been added to railroad forces during the last two years. Platform labor presents a critical situation, it was stated, for since January 1 there has been a 65 per cent turnover. Supervisors with no other duties than to oversee platform operations were recommended as a means of insuring proper loading.

Prorate of Re-coopering Voted Down

In a vigorous discussion of a proposal to prorate the expense of re-coopering broken packages in shipments of fresh fruits, melons, and vegetables as outlined by the General Committee, 125 members or 60 per cent of those voting were opposed to prorating. During the discussion, destination lines favored prorating, contending that re-coopering has the effect of reducing damage on which claim payments are prorated on a mileage basis; it is the practice of carriers to participate in the expense of reconditioning damaged shipments of commodities other than fruits, melons and vegetables; and that the expense of re-coopering damaged packages of fruits, melons and vegetables is properly chargeable to Loss and Damage Account 418 as provided in the Uniform System of Accounts for Steam Railroads.

Those opposed held that destination lines, because they control the amount of re-coopering to be done, should bear the cost; that prorating would further penalize originating lines which bear the cost of assembling and preparing cars and the expense of making out waybills. In addition it was contended that the expense of re-coopering should not be charged against the Loss and Damage Account but against station employees, Account 373.

Addresses

Chairman Archer, in his address to the convention, said: "The prompt and safe handling of the nation's traffic is paramount during such times as these, and this division, through its membership, is in a position to promote in no small measure a substantial contribution toward this goal.

"I wish I might be able to prophesy with some degree of definiteness what the next few years will bring to us, both as individuals and to the industry we represent. I can, however, predict, with no fear of doubt that for every man here there is a task confronting him more urgent and more important than ever before. This task is his contribution to, and his support of, the Government of the United States in its present undertaking of establishing a national defense strong enough and vital enough to carry us through, come what may.

"It has been well said that adequate transportation is as vital a factor to our national defense as our battle-ships or our air force. The Freight Claim Division, through its members, can and must bend their every energy toward eliminating any chance of a repetition of conditions met with in 1917 and 1918. Every member of this division has pride enough in the company he represents, pride enough in our organization, and pride enough in the country he loves, to inspire him in carrying out his assignments in this national program, to provide the best job of railroading this country, or any other country, ever produced. If you do your part, and your associates in the other branches of transportation

do as well, a long step will have been taken toward the defense goal now in sight."

The railroads are now entering what is probably the most crucial "test" in their history, according to Wilson McCarthy, trustee of the Denver & Rio Grande Western. "Whether or not we successfully meet the rapidly mounting demand of this present national emergency," he continued, "will hinge upon two things:

"First, every railroad management and every railroad employee must realize the importance of the gigantic task confronting our industry today, and the absolute necessity for each being willing to give without limit in terms of effort, co-operation, and sacrifice. Second, all American railroads must immediately get 100 per cent behind the newly created Office of Transportation and, without delay, promptly take whatever steps are necessary to carry out the suggestions and recommendations of that agency.

"Before leaving the matter of our present national emergency, I want to take time to point out a few of the grievous errors which a good many people have been and are still committing in analyzing our transportation problems today. These mistakes for the most part center around the simple fact that many people are still trying to evaluate the transportation needs of the present war on the basis of the same conditions which existed during the last war. Anyone taking the trouble to analyze present-day conditions as compared with those existing during the last war will recognize that so great an improvement has taken place that the performance during the World War no longer is applicable as a real basis for comparison today.

"This is true for the reason that United States railroads have spent approximately \$9,500,000,000 since 1923 for improvements. Of this amount about 45 per cent has been spent for new equipment and 55 per cent for other facilities of every kind. The results of this huge expenditure are shown by: (1) The entire elimination of all car shortages since 1923; (2) the placing in service of over 1,146,000 cars and 17,000 locomotives since that time; (3) the increasing of the capacity of freight cars by an average of 17 per cent; and (4) the increasing of the capacity of locomotives by 36 per cent.

"These improvements along with the general improvements in operating methods have resulted in increasing the speed of movement of our trains by over 60 per cent while the efficiency of their operation as measured in tons handled per train-hour has increased over 100 per cent. Expressed otherwise, for every hour a train operates today it handles 100 per cent more traffic than it did in 1923. The best example of the results of these improvements and the impossibility of comparing the efficiency of the railroad plant today with that of 1918 is the simple fact that in 1929—the last year of heavy traffic, the railroads handled over 8,000,000 more carloads than in 1918—and with fewer cars and fewer locomotives."

The Only Thing to Fear Is Fear

The only thing this country has to fear about the railroads' ability to handle the national defense load is fear itself, declared Holcombe Parkes, associate director of public relations of the Association of American Railroads. "Fears about the railroads' capacity to meet the demands that may be made on them," he continued, "are like most of our personal fears—groundless or at least pathetically thin. They sometimes appear to be based on both past experience and well-intended appraisal. But when we inspect these fears honestly we find, much to our relief, that this past experience is usually a broken-

down, obsolete antique and that this so-called appraisal is usually the familiar school-boy process of juggling facts and figures to get the answer in the back of the book."

Danger Signals in American Transportation

Danger Signals in American transportation were reviewed by C. E. Johnston, chairman of the Western Association of Railway Executives, before a joint luncheon with the Denver Chamber of Commerce on June 11. "It is a matter of clear record that our nation's major progress occurred under the true application of the principles of free enterprise," he said. "For half a century and more, this way stood unchallenged. Then came the shadow of approaching change. Inequities, injustices and excesses are the inevitable sequence of any monopolistic operation, and it was felt desirable to curb them through the power of the federal government. From such decision there would be little dissent. Yet, admitting the excesses resulting from the system of unchecked private enterprise, the fact remains forever engraved upon the pages of history that no other system anywhere, at any period in the record of the world, had ever produced, in so short a time and over so great an area, the moral, the social and the physical benefits that this system of private enterprise produced. No other system ever had or ever has worked so well.

"Yet within recent years, beginning with the regulation of the railroads on up to our present time, we have witnessed the steady growth of government in business. Developing slowly at first, quickened through the first quarter of the century and bursting into flood proportions with the advent of the depression in the thirties, we find that this government, which we have created, is now assuming the role of referee and is often an active participant in almost every line of commercial activity. At the moment, most of our railroads are showing improvements in traffic because of two things, first, the enormous expenditures which are being made for national defense and, second, the increase in ordinary business in response to the stimulus of these expenditures. This improvement may continue to an even higher traffic level, yet we are all aware of the manner in which the defense program is being financed.

"The railroads, particularly in the Middle West, have suffered for years because of inadequate earnings. Many of them are still in the hands of the courts. Many are engaged in the processes of reorganization; and some of the reorganization plans proposed, will wipe out the stockholders completely and cause heavy losses to other classes of investors.

"What I mean to point out is the great need of the railroads to retain their present increased revenues, in order that they may strengthen their financial structure and prepare for the uncertainties that lie ahead after our present national spending program has passed. Yet labor is demanding more wages, the cost of materials and supplies will increase, taxes are rising and will continue to rise, and there is constantly being added more regulation which further raises the cost of railroad operation. If anyone is able to figure out much for the investor in this picture, I'll say he is pretty good.

"The railroads are now faced with one of the most exorbitant demands which has ever been made upon them. Their transportation employees—the best paid men on the railroads, with their wages even now at their all-time peak—are seeking an increase of thirty per cent in their rates of pay. The non-operating brotherhoods are likewise demanding increases in their wages. These demands are made without any reliable justification or

foundation, and with an utter disregard of the national welfare. They are made upon an industry vital to national defense and industrial preparedness, which only now is slowly emerging from more than a decade of hard times.

"Almost one-third of our railroad mileage is still in bankruptcy or reorganization. The carriers are still struggling under the heavy burden of deficits which have accumulated since 1929. They are doing everything in their power to find the money with which to keep not only abreast, but ahead of the service demands which the nation will make upon them. Nothing must be allowed to interfere with that program."

Harriman Awards Made

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existence of the railroads is greatly threatened if some of these plans are consummated. As a matter of fact, if they are built "you may have to change the models of your trophies."

Judge Fletcher, before conferring the awards, made a short address in which he traced the development of safe operation on the railroads and its effect on the national defense effort. Based on "my own mathematics," the A. A. R. vice-president presented a "brain wave" to the effect that the average American citizen could ride on a passenger train traveling 50 m. p. h., 24 hr. a day, and go 4,000 years before an accident occurs. With respect to the importance of the railroads in the national defense program he pointed out that the attention of the country has been focussed on the ability of the railroads to do the job and not to any degree on other agencies of transportation. Since we are fighting for the concept that "the welfare of the individual is supreme," it is of extreme importance that the safety program continue to be pushed vigorously, he said, for safety itself is based on that idea.

In presenting the Harriman awards Judge Fletcher pointed out that the presentation of a gold, a silver and a bronze medal does not indicate any degree of difference in safety records of the three railroads receiving the awards, but merely differentiates the class of carrier into which they fall. The awards are determined on the basis of official records and summaries of the I. C. C. for 1940.

The Norfolk & Western, which had the lowest weighted casualty rate of any of the 36 contesting roads in Group A, has been awarded the gold medal in two previous years. Its passenger casualty record for 1940 shows a reduction of 90 per cent, as compared with the average for the three years 1923 to 1925, inclusive. As compared with the same period, the 1940 employees' casualty rate of 3.93 is a reduction of 84 per cent. "This represents a total saving since 1924 of 92 employee lives and the prevention of some 12,000 reportable employee injuries."

The Ann Arbor, which had the best record of the 55 railroads in group B, received the silver medal previously in 1931 and 1937. There was no fatal injury to any passenger or employee of the road in any of these years or in 1940. The Ann Arbor has not had a single passenger fatality in either a train or train-service accident since its records began in 1921. Since 1923 its employee casualties have been reduced 96 per cent.

The Missouri-Illinois (a unit of the Missouri Pacific system) had the lowest average accident rate of any of the 38 roads in group C. In fact, in winning the 1940 bronze medal this road has established the lowest rate of all of the 141 roads considered in the three groups.

NEWS

Preference Rating for Freight Cars

OPM action on priorities will
help builders obtain
scarce materials

Because of "a growing tightness" in the supply of freight cars, a limited blanket rating has been extended to 60 car builders which will aid them in obtaining scarce materials and thereby speed up their production schedules, according to an announcement by E. R. Stettinius, Jr., director of priorities, Office of Production Management, on June 19.

The rating provided in the order is A-3. This, it is explained, puts the requirements for freight car construction and repairs behind the top needs in the A-1 classes, but puts them ahead of the less essential needs with lower ratings. The order provides that the rating can be used to facilitate the obtaining of material and equipment entering into freight car construction, including railroad, industrial and mine freight cars. The order, it is further declared, is similar to the limited blanket rating already extended to airplane makers and builders of ships for the Maritime Commission merchant vessel program.

Car builders who use the rating, including railroads which build their own cars, can extend it to their suppliers by executing copies of the order and serving it on their sub-contractors, who, in turn, can extend the rating to their own suppliers by going through the same procedure.

In a letter accompanying the order, car builders were urged to substitute non-scarce materials for critical items wherever possible. It was suggested that wood be substituted for critical metals wherever possible and that, in addition, the car builders specify sizes and thicknesses of steel sheets and plants so as to minimize production difficulties.

The rating extended to the car builders applies not only to orders for critical materials but also to orders for cutting and other perishable tools and equipment, it was stated. The rating does not cover machine tools, however, and the rating for machine tools and similar production machinery must be obtained in the usual manner by application for preference rating certificates.

"You will employ extreme care in making use of this privilege (the preference rating) and the extension of the same to your suppliers," wrote Mr. Stettinius to the car builders, "and you will emphasize proper scheduling in the ordering of neces-

sary material." It was also explained that the general preference order is applicable to material and equipment entering directly or indirectly at any state of construction, into the construction of freight cars by the producers who are granted the use of the A-3 rating.

The new action, states the announcement, follows a study in which it was shown that the national defense program has placed heavy demands upon the country's rail transportation system. This, in turn, has placed a corresponding burden upon producers of freight cars. Moreover, the production of materials necessary for defense has also greatly increased the demand for cars used in mines and industrial plants, according to Mr. Stettinius. Because of these facts, the minerals and metals group of the priorities division recommended that a general priorities system be established to assure freight car producers of adequate deliveries of materials and equipment.

"It is expected," concludes the announcement, "that the use of this order will greatly facilitate freight car building, will assure the builders of a constant flow of adequate supplies and will thereby facilitate the overland transportation of national defense materials."

Would Permit T. V. A. to Pay for Bridges

The House has passed and sent to the Senate H. R. 3182, a bill introduced by Representative Gregory, Democrat of Kentucky, which authorizes the Tennessee Valley Authority to indemnify owners of railroad or highway bridges which may have to be relocated because of the building of dams and the submerging of land. Before passing the bill the House added several amendments, one of which was offered by Representative Kean, Republican of New Jersey, the effect of which would be to force the TVA to pay all the costs of relocations out of its earnings.

Maine Central Fetes Boys Who Extinguished Trestle Blaze

Two high school boys who abandoned a scrub baseball game and raced a mile to extinguish a fire threatening a Maine Central trestle between Wiscasset, Me., and Rockland, were the guests of the railroad for a ride, a luncheon and a gift on June 15. Allowed to select their own rewards, one lad chose a watch and the other (who already had a timepiece) chose to accept the railroad's check for \$25. The two rode in the cab from Wiscasset to Portland on the morning train; were the guests of the Maine Central for lunch and returned home on the evening connection of the "Pine Tree Limited."

ICC Move Talk Causes Jitters

Harry Hopkins is said to have
his eye out for a nice cool of-
fice, so ICC staff is alarmed

Questioned at his June 17 press conference on the possibility of moving the Interstate Commerce Commission to some other city to alleviate the congestion in Washington, President Roosevelt said that Congress would have to act before the commission could be moved. Thus he could not understand why the House interstate and foreign commerce committee had sent its protest to him.

He then declared that he did not know why press reports had picked out the commission for special attention in view of the fact that no determination had been made as to which agencies might be moved. In fact, the President went on, the matter of moving agencies out of Washington is hardly more than in the study stage. He did say, however, that there was a real need for office space in Washington and told reporters that it now appears that some federal workers will have to be moved to other cities.

Proposals to move the Interstate Commerce Commission and other agencies out of Washington, D. C., in order to provide office space for the federal government's expanding national-defense organizations are drawing protests from many interested parties who have lately decided that the suggestions are to be taken seriously and that moving day for someone may come in the near future. As noted in the *Railway Age* of June 14, the commission has received from the Bureau of the Budget a request for information as to the amount of space that might be made available if all or part of its activities were moved elsewhere, and similar communications have been received by other agencies, including the Railroad Retirement Board.

At the time of the present writing there was no comment from the commission as to its reaction to the proposal, although there is naturally considerable concern among members of the staff, as is the case at the Railroad Retirement Board. Chairman Murray W. Latimer said on June 16

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Pelley Reports To Public on RRs

Says carriers, with cooperation, will meet the transportation needs of the country

Rail transportation is adequate to meet present demands and it will be kept adequate to meet the increasing transport requirements of commerce and national defense, said J. J. Pelley, president of the Association of American Railroads, in a June 13 radio address over a National Broadcasting Company network. Generally, Mr. Pelley reviewed briefly what has been done since the war broke out in Europe, and outlined the transportation situation as it stands today.

He predicted that the transport job will be "bigger than anyone anticipated," and it may come "faster than anyone foresees"; but "it can hardly grow faster and more surprisingly than did the demand for transportation when the war began in Europe in September, 1939." In the latter connection Mr. Pelley recalled how the railroads handled "without congestion or delay" the increase of more than 50 per cent in traffic which came between May and October of 1939. He went on to point out how the carriers, "looking ahead to 1941," undertook a program of providing 100,000 new cars for service this year; and how, "still looking to the future," they have embarked upon a plan of adding 120,000 additional cars for the traffic of 1942. By this fall, Mr. Pelley said, the railroads "will have added 195,000 new and rebuilt cars to their fleet since war started in Europe."

The A. A. R. president proceeded to list "some of the things the railroads have done so far in the defense effort," summing up his listing with this: "The railroads in 1941 have moved more tons of freight more miles—nearly 25 per cent more, in fact—than they moved in the same months of the war year of 1918. They have done it without any of the congestion, delays and car shortages of that time, and have done it with fewer freight cars than they had in 1918."

Next, the A. A. R. president asserted that "the number of cars the railroads have is important, but the use made of the cars is more important"; and he continued to point out how the congestion in 1917-18 was due to the use of cars for storage, i. e., the loading of too many freight cars that could not be unloaded promptly at destination. But "the handling of railroad transportation has changed since the World War days." Among other things, Mr. Pelley said, "we have better railroads," and more efficient use of equipment and facilities; also, the benefit of the World War experience as a result of which "all of us acquired a keener appreciation of the fact that transportation is an enterprise which requires cooperation both among railroads, and between railroads and those who use them." The railroad industry, Mr. Pelley went on, is well-organized today for that sort of cooperation. "Railroads themselves work together through the Association of American Railroads. Shippers work with

Is Daniel Willard Longest Railway Age Subscriber?

Daniel Willard, recently elected chairman of the Baltimore & Ohio, after 31 years as its president, told a *Railway Age* staff member last week that he has been a continuous subscriber to that paper and its predecessor, "Railway Age-Gazette" and "Railroad Gazette," since 1884. He filled out his first subscription blank while working as a brakeman on the Soo (of which he later became the superintendent) and has been reading the weekly railroad journal ever since.

What Mr. Willard and the *Railway Age* would like to know is whether any subscriber can claim to have beaten that record? Step right up, gentlemen.

the railroads through 13 regional Shippers Advisory Boards, and a national association of these boards."

Thus, as Mr. Pelley next put it: "With our vastly improved railroad plant, with our new organization through which we have the full cooperation of the railroads with one another, the cooperation of shippers and of departments of the government, the railroads are ready to supply the government and the public with the maximum amount of rail transportation." The carriers "are alert to the job ahead and are working on it." They know that they may be called upon to take over more traffic due to the transfer of intercoastal ships to foreign services and the transfer of tankers from Atlantic coastwise service. With respect to the latter situation Mr. Pelley said: "For many years the railroads have been a diminishing factor in the transportation of oil, as the oil companies have built up their own transportation systems of tank ships, barges, pipe lines and tank trucks. But to the extent tank cars are and can be made available, the railroads will do what they may be called upon to do in connection with this situation."

Concluding, Mr. Pelley gave assurance that there will be no breakdown of rail transportation; while the industry doesn't know just what the demand may grow to be, "we do know that the railroads have the capacity and the organization to keep pace with its growth."

Status of R.F.C. Rail Loans

The monthly financial statement of the Reconstruction Finance Corporation as of May 31 shows disbursements to railroads (including receivers) of \$810,236,675 and repayments of \$340,455,838.

Changes in Domestic Bill of Lading and Live Stock Contract

The Interstate Commerce Commission in a report by Commissioner Porter has approved changes in the uniform domestic bill of lading and the uniform live stock contract, made to bring the terms and conditions into compliance with the requirements of the Transportation Act of 1940.

N. Y. C. and P. R. R. Agree on Wabash

Stipulations acceptable to both roads announced at I. C. C. hearing

Expected opposition on the part of the New York Central to the application of the Pennsylvania to acquire control of the reorganized Wabash through the purchase of its capital stock vanished into thin air at the very outset of the hearing on the matter before Commissioner Carroll Miller and Examiner R. R. Molster of the Interstate Commerce Commission in Washington, D. C., on June 12, when attorneys for both the Central and the P. R. R. announced that certain conditions had been agreed to which were acceptable to both parties.

At the same time during the two-day hearing efforts of the New England Governors and the Boston Port Authority to inject the question of the Pennsylvania's alleged control of the Pennroad Corporation and its influence on the New York, New Haven & Hartford and the Boston & Maine were temporarily thwarted when Commissioner Miller ruled that that question could not be gone into in the instant case. Counsel for the Boston Port Authority had asked the commission to issue a sweeping subpoena requiring the Pennroad Corporation and the Pennsylvania to produce various officers and voluminous records in an attempt to show that the Pennsylvania dominated Pennroad and through it controlled or could control the New Haven and the Boston & Maine.

In his opening statement of the case the P. R. R.'s general solicitor, John Dickinson, announced that the following stipulations had been agreed to by both the Central and the P. R. R. with the result that the Central would withdraw its opposition to the application:

1. That shares of stock of the New Haven owned by the Pennsylvania or the Pennsylvania Company are placed in a trust agreement;
2. That shares of stock of the Lehigh Valley owned by the Pennsylvania or the Pennsylvania Company are placed under a trust agreement;
3. That shares of stock of the Lehigh Valley owned by the Wabash which will become part of the assets of the reorganized Wabash upon consummation of the reorganization are placed under a trust agreement.

Jacob Aronson, vice-president in charge of law of the N. Y. C., confirmed Mr. Dickinson's announcement.

The hearing on the application of the Pennsylvania had originally been set for May 10, but was postponed to June 12 when the New York Central was authorized to intervene. In its intervention petition the Central alleged that the P. R. R. owned 30.17 per cent and the Wabash owned 21.40 per cent of the stock of the Lehigh Valley and the Wabash owned 99.44 per cent of the voting stock of the Ann Arbor. The petition further alleged that the Pennsyl-

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Ditch Done Up in Defense

New Deal rides herd on cabinet
and OPM to get support for
its socialist project

Hearings before the House committee on rivers and harbors on Chairman Mansfield's bill (H. R. 4927) to authorize President Roosevelt to carry out the United States-Canadian agreement with respect to the St. Lawrence power and seaway project got under way on June 17 with the testimony of Secretary of War Henry L. Stimson. Secretary of State Cordell Hull had been scheduled to lead off for the proponents, but illness precluded his appearing, and the State Department was represented by Assistant Secretary of State A. A. Berle, who followed Mr. Stimson.

Secretary Stimson did not go so far as to say that the project was "essential" to national defense, but he did insist that it would be a "very valuable" work in the interest of national defense, particularly the hydro-electric power phase. And although he thinks work on the project should go forward now, Mr. Stimson would not give it priority over a number of important munitions. He added that the question of such priority was not apt to arise in view of the fact that materials required for the seaway would not be the same as those required for more-pressing defense needs.

The Secretary of War preferred to deal in broad, general questions; and he was impatient when members of the committee sought specific information from him. At one point he appealed to Chairman Mansfield, complaining that he was being asked questions which should be reserved for subsequent witnesses. Later in response to a question from Representative Peterson, Democrat of Georgia, Mr. Stimson suggested that his hour in the witness chair had been ill-spent if that question had not been answered. Whereupon Mr. Peterson expressed the opinion that the Secretary's time had been "ill spent," thereby drawing protests from other committee members who asserted that the witness had been "very frank."

Meanwhile, Secretary Stimson had recalled that he was Secretary of State under President Hoover when the St. Lawrence treaty subsequently rejected by the Senate had been negotiated with Canada. He quoted from a statement made by Mr. Hoover who predicted that the seaway's "influence in cheapening transportation" would spread widely through the interior while the power phase would benefit the northeast. The only "substantial" difference between the project contemplated in the rejected treaty and that now proposed, he pointed out, lies in the single-stage project now planned as compared with the treaty's two-stage proposal. That change, Mr. Stimson said, is an improvement from the point of view of the United States which has favored the single-stage development right along.

Another benefit over the project proposed in the 1932 treaty is the time re-

quired for construction. When the treaty was negotiated, it was estimated that 10 years would be required to complete the project. Mr. Stimson is now informed that "modern methods" will make it possible to do the job in four years; and "with luck" the seaway might be completed in "three working seasons." The benefits to the United States, as the Secretary of War sees them, are: Increased shipbuilding capacity; a "slight improvement" in the way of obtaining a more protected route for shipments to Great Britain; and the "great advantage" resulting from the fact that 2,200,000 horsepower of electricity would become available to the United States and Canada for their defense efforts. Continuing, Mr. Stimson advised that the United States should take the "long view" and provide itself with these and other benefits, regardless of what "immediate disturbances" might be caused.

Questioned by Chairman Mansfield as to claims that the project could not be completed in time to make its benefits felt in connection with the defense program, Mr. Stimson replied that it is not safe to act upon hopes that the country's emergency will be short. In his opinion we must be prepared for a long emergency, and there is a "very good chance" of its lasting long enough to enable the country to cash in on the project's defense aspects. While he thought the treaty method was the proper approach when he was Secretary of State, Mr. Stimson told Representative Carter, Republican of California, that he had not considered the legal aspects of the present joint-agreement approach. Later Representative Culkin, Republican of New York, asked if there were any impropriety in the present approach, and the witness was aware of none. However, he told Representative Rodgers, Republican of Pennsylvania, that he would rather not comment on the departure from the treaty approach.

Mr. Rodgers also suggested that a transportation emergency could not be scheduled, and thus it might arrive when the seaway was frozen up. In such a case Mr. Stimson conceded that the alleged benefits would be absent, but he stated that peaks of industrial production and agricultural harvests usually come in seasons of open navigation. A question Mr. Stimson didn't care to answer came from Representative Bender, Republican of Ohio, who asked if the diplomatic correspondence in connection with the agreement had not indicated that Prime Minister Mackenzie King of Canada entertained doubts as to the wisdom of the project; if Canada had not gone along only because it did not want to displease President Roosevelt. On the question of cost the Secretary of War accepted the \$200,000,000 estimate of the army engineers, and thought the project "pretty cheap" as compared with the cost of other defense efforts.

Before calling Assistant Secretary of State Berle, Chairman Mansfield read into the record the brief letter endorsing the project which he received recently from Secretary of State Hull, as noted in last week's issue. Then Mr. Berle offered for the record various documents underlying the agreement. The question of the legal-

(Continued on page 1130)

"Brass Tacks" on Fall Car Supply

Suggestion made that trucks
be used for l. c. l. to get avg.
car load up to 8 tons

Assuming Association of American Railroads' estimates of next fall's carloading peak to be correct, the railroads must make further improvements in car utilization if tight situations or indeed actual shortages are to be avoided, according to data placed before the chief operating officers attending the May 26 Chicago meeting called by C. H. Buford, vice-president of the A. A. R. in charge of the Operations and Maintenance Department. The data assumed a carloading peak of 932,100 cars, and calculated the number of cars required to handle that business on the basis of car turnaround periods ranging from 11.8 days to 12.8 days.

On the basis of the present turnaround time—12.4 days—and assuming other factors remain unchanged, there is an indicated shortage of 65,005 cars. In other words, it was estimated that there will be 1,586,143 cars in serviceable condition next October; but 1,651,148 cars would be required to handle 932,100 car loads when the turnaround time was 12.4 days. To meet the estimated peak the turnaround time would have to be cut to about 11.9 days; then 932,100 car loads could be handled with 1,584,570 cars.

But it is not the purpose of the industry to leave the turnaround time or other efficiency factors unchanged, as discussions at the meeting indicated. There was recognition of the fact that the carriers must continue to do a satisfactory job if certain groups ready to plug for government operation are to be disappointed and made mute. Thus the suggested set of principles governing the handling of equipment in the interest of elimination of car waste which came out of the meeting, and other like proposals brought out in the discussion.

Among other things stressed was the importance of establishing adequate supervisory forces, and of furnishing those forces with adequate records so that maximum efficiency might be obtained from the use of equipment. Further in connection with supervision it was suggested that the car situation be not permitted to develop into a "battle of clerks," indulging in endless correspondence without particular effect on operation. Rather it was recommended that the matter should become a "battle of vice-presidents." The discussion of opportunities to improve car handling revolved generally around such subjects as the checking of station on-hand reports; savings in use of cars for l. c. l. service; holding an unnecessary number of cars for industry loading at competitive points; delayed switching and slow releases; delayed road movements and interchanges; delays on account of intraplant use of cars; slow schedules; slow movements of device equipped cars; delays to "parts" cars; and cars held under load with company material.

Recommendations for improvements under each of the foregoing categories were made in a statement presented at the meeting by W. C. Kendall, chairman of the Car Service Division. Meanwhile there were also before the meeting other detailed suggestions, presented by J. F. Deasy, vice-president of the Pennsylvania. Among other things Mr. Deasy suggested that if the A. A. R. does not have enough authority to deal with the present car situation, it should ask the railroads for the kind of authority needed. Also, the P. R. R. vice-president suggested that each of the three regional groups supply the A. A. R. with the names of high-class transportation officers who could be requisitioned by the A. A. R. to review operations on railroads which are demanding help of the Association.

Furthermore, Mr. Deasy went on, the A. A. R. should carry on an educational campaign in cooperation with the railroads for the guidance of equipment users, to avoid car waste. And if the present publicity department of the A. A. R. is inadequate, he would have the railroads loan to the A. A. R. three good publicity men to do nothing but concentrate on this problem. Because the situation is a competitive one, Mr. Deasy would also turn to the A. A. R. on the matter of reducing the number of consignments to lake ports and tidewater points. Another matter which the P. R. R. vice-president would have the A. A. R. handle is that of reviewing car minima for the purpose of getting heavier loads, even though that might involve rate concessions for cubical capacity or weight capacity loading. As was done in the aforementioned suggested set of principles, Mr. Deasy had recommended that a goal of eight tons per car for merchandise cars be fixed. Attainment of such a goal, he estimated, would result in saving the loading of about 3,000,000 cars a year.

The suggested set of principles includes 14 items relating to the more efficient handling of carload freight, and a like number relating to l. c. l. traffic. Among the latter are those calling for a review of the possibilities of substituting motor-truck service for branch line and intra-terminal switching operations. It was pointed out in the former connection that the Pennsylvania operates 107 station-to-station truck routes, saving 535 box cars daily, while a daily saving of 1,000 cars results from P. R. R. trucking in lieu of intra-terminal switching.

In the aforementioned data which was placed before the chief operating officers, the estimate of 1,586,143 serviceable cars for next October 1 is built up as follows: Ownership on May 1 was 1,646,956 cars; add thereto 56,502 cars now on order; subtract therefrom 25,000 cars to be retired from May 1 to October 1; gives 1,678,458 cars, representing approximate ownership on October 1. Then it was assumed that bad order cars would amount to 5.5 per cent of ownership, reducing the total serviceable to the 1,586,143. The calculations as to the number of cars required on the basis of different turnaround periods were set up for an assumed weekly peak of 995,500 cars as well as the 932,100 mentioned at the outset. If the peak reached the former proportions, while the turnaround time remained at 12.4 days and other fac-

tors remained static, it would require a supply of 1,763,457 serviceable cars to handle the business.

Lewis Will Head Mediation Board During Fiscal 1942

Continuing the policy of rotating its chairmanship annually, the National Mediation Board has designated David J. Lewis to serve for the fiscal year beginning July 1. George A. Cook has been chairman during the current fiscal year.

N. P. Veterans Meet at Portland

The seventeenth annual convention of the Veterans' Association of the Northern Pacific was held at Portland, Ore., on June 12-14. J. A. LaDue of St. Paul was elected president and W. A. Ramond was elected vice-president. Minneapolis, Minn., was selected as the place for the 1942 convention.

Army May Guard Its Freight Shipments

Through arrangements with the Association of American Railroads, guards may now be sent with Army freight shipments in cases not heretofore covered by regulations, said a June 14 announcement from the War Department. The announcement added that previously guards or attendants were allowed only on freight trains carrying live stock or certain perishables.

Money for National Park Service's Travel Bureau

Before passing the Interior Department appropriation bill for the fiscal year ending June 30, 1942, on June 3, the Senate adopted an amendment proposed by its committee on appropriations to restore an appropriation of \$75,000 for the Travel Bureau of the National Park Service. As noted in the *Railway Age* of May 10, the item had been eliminated from the bill by the House.

Vacations with Pay

National Mediation Board meetings with labor and management representatives on the demand of 14 non-operating unions for vacations with pay were resumed this week in Washington, but the status of the case could not be learned upon inquiry at the Board's offices. An official at the Mediation Board simply stated that "negotiations were continuing."

As was pointed out in last week's issue, the meeting had been in recess while the Board awaited an answer from the parties to its suggestion that the controversy be submitted to arbitration.

Use of Pennsylvania Turnpike

Having received many inquiries regarding the use of the Pennsylvania Turnpike between Harrisburg, Pa., and Pittsburgh by motor carriers, the Interstate Commerce Commission, Division 5, has issued a notice for the information and guidance of all concerned. Generally, the notice advises that carriers operating on parallel highways may use the Turnpike as an auxiliary highway without obtaining prior authority if they comply with certain conditions.

The conditions are that the commission

be advised of the Turnpike operations planned; that reasonable service be continued at points on existing routes and that no new points be served; and that the right to use the Turnpike as an alternate route shall continue only so long as does the right to use the parallel route. Motor carriers not qualifying by reason of their operations on routes designated as parallel to the Turnpike must apply for authority before using the Turnpike.

Export Freight in May

Cars of export freight, other than grain, unloaded at Atlantic, Gulf and Pacific ports in May totaled 50,162 cars, an increase of 3,069 compared with May, 1940, according to the Association of American Railroads. Cars of grain for export unloaded in May this year at these ports totaled 5,290 compared with 2,175 in the same month last year.

"No congestion or delay to traffic exists at any of the Atlantic, Gulf or Pacific ports, due to the cooperation of steamship lines, port authorities, exporters and shippers," the A. A. R. statement said.

Injuries and Diseases of Railroad Employees

Chairman Wheeler of the Senate committee on interstate commerce has introduced Senate Resolution 128 to authorize and direct the Railroad Retirement Board "to make an immediate, thorough, and complete investigation of the incidence of injuries and diseases incurred by employees through employment in the railroad industry and the social and economic consequences of such injuries and diseases." The resolution further directs the Board to report the results of the investigation to the committee "at the earliest practicable time."

May Operating Revenues 27.8 Per Cent Above 1940

Preliminary reports from 88 Class I railroads, representing 81.3 per cent of total operating revenues, made public recently by the Association of American Railroads, show that those roads, in May, had estimated operating revenues amounting to \$356,881,723 compared with \$279,300,720 in the same month of 1940 and \$380,048,756 in the same month of 1930. The May gross was 27.8 per cent above that for May, 1940, but 6.1 per cent below May, 1930.

Freight revenues of the 88 Class I roads in May amounted to \$299,316,766 compared with \$229,939,071 in May, 1940, and \$292,863,056 in May, 1930—30.2 per cent above the former, and 2.2 per cent above the same month in 1930. Passenger revenues totaled \$30,774,491 compared with \$24,971,307 in May, 1940, and \$50,990,119 in May, 1930—23.2 per cent above the former, but 39.6 per cent below the same month in 1930.

Transportation Specialist in Agriculture Marketing Service

John L. Buntin of Orlando, Fla., has been appointed transportation specialist in the Agricultural Marketing Service, U. S. Department of Agriculture. Mr. Buntin, who for the past five years has been Flor-

ida freight agent for the Chicago, Indianapolis & Louisville, will have immediate supervision of matters in the Agricultural Marketing Service pertaining to transportation. These activities include the direction of all reporting programs in connection with shipments, movement, and unloads of farm products as reported by public carriers. In this capacity he assumes the duties of the late James G. Cross.

Dan Cunningham Day

By order of the mayor of Salt Lake City, June 11 was proclaimed "Dan Cunningham Day" in order that the citizens of Salt Lake City "may have an opportunity to honor a man, D. G. Cunningham, master mechanic of the Denver & Rio Grande Western whose service has been nobly and freely given to civic betterments." The occasion was the exhibition of a D. & R. G. W. Diesel-electric locomotive which the proclamation said is being placed in service in Salt Lake City to conform with the new smoke abatement program. "Mr. Cunningham," the proclamation continued, "has rendered valuable service far beyond the ordinary call of duty in aiding the smoke abatement program, and in co-operating in the modernization of the Salt Lake fire department."

Streamliners To Be Placed In Service In July

The two new 17-car streamliners, the City of San Francisco and the City of Los Angeles, which the Pullman-Standard Car Manufacturing Company is constructing for operation between Chicago and San Francisco, Calif. and Chicago and Los Angeles will be ready for service about the middle of July. The new City of San Francisco, which will replace the present Forty-Niner, will operate on a 39¾-hr. schedule as a companion to the present City of San Francisco over the Chicago & North Western, the Union Pacific and the Southern Pacific. The new City of Los Angeles will replace one of the present trains of that name being operated over the Chicago & North Western and the Union Pacific. This replaced train of 13 cars will be used elsewhere.

Equipment on Order

Class I railroads on June 1 had 65,047 new freight cars on order, the largest number on order at any one time since 1924, according to the Association of American Railroads. On the same day last year there were 15,039 new freight cars on order. New freight cars for which orders had been placed on June 1 this year included 39,738 box, 22,264 coal, 1,349 flat, 1,220 refrigerator and 476 miscellaneous cars.

Class I rail on June 1 had 517 new locomotives on order, of which 231 were steam and 286 electric and Diesel-electric. New locomotives on order on June 1, last year totaled 129, of which 88 were steam and 41 were electric and Diesel-electric.

New freight cars put in service in the first five months this year totaled 29,648 compared with 32,881 in the same period last year. New locomotives put in service in the first five months this year totaled 218, of which 53 were steam and 165 were

electric and Diesel-electric. In the same period last year, 37 new steam and 114 electric and Diesel-electric locomotives, a total of 151, were installed in service.

Hudson Bay Line Not Attractive in War or Peace

War conditions have seriously cut wheat movements out of such Canadian ports as Churchill in Hudson Bay and also at Vancouver. Western members of the House of Commons whose parties were responsible years ago for having the Hudson Bay Railway built are now asking why their pet road is not being used. They were told that during the war the reason was Britain was not in a position to provide convoys for ships coming out of Hudson Bay, while in peacetime it was simply because vessel owners would not send their ships to Churchill empty to bring out grain. They disliked the one-way cargo idea.

Transport Minister P. J. A. Cardin told the House at Ottawa last week that the total of the operating deficits on the Hudson Bay Railway for the five years ending March, 1940, was over \$1,500,000, while the total wheat moved over that road to Churchill elevator on Hudson Bay for six years ending March, 1941, was about 9,500,000 bushels. It is estimated that it would require annual movements of 10,000,000 bushels over that road to meet operating costs.

Rail Production Gains in 1940

According to statistics compiled by the American Iron and Steel Institute, rail production in the United States in 1940 reached 1,678,986 tons, an increase of 366,339 tons, or 28 per cent, and was larger than for any year since 1930. It was also 3.7 times as many tons as were rolled in 1932, which was the year of lowest production during the present century. As in recent years the heavier sections predomi-

American Railway Engineering Association adopted its 112- and 131-lb. sections, the combined tonnages of all sections weighing 120 lb. and more was greater than for any year since 1931, and the tonnage for sections in the classification from 100 lb. to less than 120 lb. was greater than for any year since 1930, except in 1937.

In the weight group that includes sections weighing from 100 lb. to, but not including, 120 lb., 688,109 tons were rolled in 1940, an increase of 67,117 tons, or 11 per cent, compared with 1939. In the next group, which comprises sections from 120 lb. to, but less than, 136 lbs., the rollings in 1940 amounted to 486,716 tons compared with 480,675 tons in 1939, an increase of 6,041 tons. While this may seem to be a small increase, the tonnage represented by this group is greater, with the exception of 1939, than the total tonnage of all sections 120 lb. and heavier, for any year since 1931; and thus indicates an increasing use of heavy rail on lines of dense traffic and high speed.

Although the sections weighing less than 100 lb. comprised only about one-fourth of the total tonnage of the rails rolled in 1940, the largest increases, relatively, were in these groups. Production in the classification 85 lb. and less than 100 lb. was 225,006 tons, compared with 63,598 tons in 1939, an increase of 161,408 tons, or 254 per cent. The next classification, over 60 lb. and less than 85 lb., showed an increase of 94,653 tons, or 473 per cent, from the 20,013 tons produced in 1939 to 114,666 tons in 1940.

Again, as for almost three decades, most of the rails (slightly more than 97 per cent) produced in 1940 were rolled from open-hearth steel. The tonnage of rails produced from Bessemer and electric steels was insignificant, amounting to only 683 tons, and all of the rails rolled from these steels weighed 60 lb. or less per yard. In addition to the rails rolled from ingots in 1940, the total production for the year in-

Production of Rails by Weight Per Yard in 1940 (Net Tons)

Year	Under 50 lb.	50 and less than 85 lb.	85 and less than 100 lb.	100 and less than 120 lb.	120 and less than 136 lb.	136 lb. and over	Total
1920.....	547,728	485,333	1,066,937	.....	816,612	.....	2,916,610
1925.....	183,240	246,006	857,215	.....	1,833,027	.....	3,119,488
1926.....	220,931	287,041	893,382	.....	2,202,413	.....	3,603,767
1927.....	181,256	194,048	604,178	1,472,155	691,627	.....	3,143,264
1928.....	150,301	140,813	521,240	1,348,199	804,639	.....	2,965,192
1929.....	158,326	115,297	458,783	1,381,631	934,758	.....	3,048,795
1930.....	107,101	91,055	300,024	935,756	664,085	.....	2,098,021
1931.....	56,100	28,587	138,206	555,242	518,546	.....	1,296,681
1932.....	18,654	15,350	32,024	240,902	143,944	.....	450,874
1933.....	*55,010	†17,263	45,890	172,488	175,601	.....	466,252
1934.....	*78,495	†19,164	82,476	550,639	365,055	35,622	1,131,451
1935.....	*63,982	†16,529	95,902	381,696	172,891	65,921	796,921
1936.....	*107,644	†23,629	111,956	684,910	412,687	25,402	1,366,228
1937.....	*113,889	†92,219	126,155	815,280	436,698	34,987	1,619,228
1938.....	*50,375	†27,627	57,550	371,534	188,034	2,522	697,642
1939.....	*92,994	†20,013	63,598	620,992	480,675	34,375	1,312,647
1940.....	*140,443	†114,666	225,006	688,109	486,716	24,046	1,678,986

* 60 lb. or less per yd.

† Over 60 and less than 85 lb. per yd.

nated, the tonnage for sections weighing 100 lb. and heavier comprising approximately three-fourths of all rails rolled in 1940.

Compared with 1939, the rollings in all weight classifications, except one, showed an increase, this one being for sections 136 lb. and heavier. Indicating a continuation of the trend toward the use of heavier sections, that has been in evidence since the

cluded 45,511 tons rolled from old rails and 3,448 tons rolled from new seconds; 27,662 tons of girder and high T-rails; and 172 tons of alloy-steel rails.

W. P. A. is Building Access Roads

More than \$17,000,000 worth of access roads leading to naval, military and defense industry sites in many parts of the country are now under construction by a force of

more than 15,000 W. P. A. workers, according to an announcement this week by Howard O. Hunter, Works Projects Administrator.

On the basis of a report covering operations as of May 1, Mr. Hunter said there were 120 active projects in the program with a total value in W. P. A. funds of \$17,143,017. There were, in addition, more than \$3,700,000 worth of projects which had been approved but not placed in operation, and still more projects have been approved in the interim, he said. Projects within naval and military reservations and those in the strategic highway system are not included in these totals, it was pointed out.

Each of the projects has been certified by either the Secretary of War or the Secretary of the Navy as important to the defense program, Mr. Hunter said. In a number of instances crews are being worked 24 hours a day, seven days a week, in order to speed completion of the jobs. It was emphasized that the roads are needed to facilitate traffic at Army and Navy reservations, airports, munitions and armament plants and similar places.

Merritt of R. E. A. Elected Sales Executives Head

Presidency of the National Federation of Sales Executives has been given to a railroad transportation traffic officer. Kinsey N. Merritt, general sales manager, Railway Express Agency, New York, was elected president of the Federation at its sixth annual convention in Cincinnati, Ohio, this week. This organization is the national guiding body of hundreds of local associations of salesmen and sales executives which include in their membership the 5000



Kinsey N. Merritt

top-ranking men in the field. Among other things it lays out program themes for local clubs and publishes literature explaining the function and importance of sales activity in the national economy.

Mr. Merritt, who is 50 years of age, has spent his entire business career in express service, holding various positions in operations work until 1936, when he was ap-

pointed to head the newly-created Sales department of the Agency at its New York executive headquarters. In this post he directs the traffic-getting policies and activities of the organization for railroad and air express services. Mr. Merritt is an able speaker and tours the nation frequently, appearing at programs of transportation, commercial, civic and sales groups. His talks cover a wide variety of subjects ranging from transportation proper to modern sales methods. For three years he has lectured before the class in transportation at the Harvard University Graduate School of Business Administration.

Brotherhoods Ask for Dismissal of D. & H. Complaint

Dismissal of a complaint filed by the Delaware & Hudson in the District Court at Chicago, against ten members of the National Railroad Adjustment Board and Judge Royal A. Stone, was asked by the Brotherhood of Railroad Trainmen, the Order of Railway Conductors and the Brotherhood of Locomotive Firemen & Enginemen, who contended that the Federal District Court has no jurisdiction over cases involving railway labor grievances before the Adjustment Board. As reported in the *Railway Age* of June 14, the railroad had asked for a court order which would direct the Adjustment Board to reinstate 170 disputes involving claims for extra compensation. In its complaint filed late in May, the D. & H. charged that in 73 of the 170 cases, Judge Stone, associate justice of the Minnesota Supreme Court, who had been called in to act as referee, had reached decisions but failed to issue them. The court ordered briefs filed and set July 7 for oral arguments.

C. & N. W. Seeks Scrap for Defense

What promises to prove a tremendous source of scrap metal heretofore overlooked in defense efforts, may be developed as the result of an investigation ordered on June 16 by R. L. Williams, chief executive officer of the Chicago and North Western. Mr. Williams has requested his operating department to make an immediate survey throughout the 10,000 miles of territory served by the railroad to determine what amount of dormant scrap metal is available for defense purposes in small communities and agricultural sections not served through normal trade channels. Mr. Williams called for the check on scrap as the result of observations made in a recent inspection tour of the road.

"I found that many small communities had dumps full of old automobiles, farm implements, and other discarded metal objects which were simply rusting away," he explained. "Apparently no effort has been made for years to clear any of this scrap, and it stands to reason that in these small towns and on farms there is little or no commercial effort to dispose of this material."

"With the government calling on the railroads for every ounce of available metal, I have a very definite feeling that there is a tremendous quantity of dormant scrap in these smaller communities which we serve and the farms adjacent to our

line which can be made available if proper encouragement on the basis of national defense necessity is given to the owners."

Seven Large Eastern Truck Concerns Contemplate Merger

Seven large over-the-road common carrier highway truck lines operating along the Atlantic seaboard from Florida to Maine expect to ask authority from the Interstate Commerce Commission to consolidate their properties under a holding company to be called Associated Transport, Inc. All of the lines were among that group of 56 highway carriers whose plan to merge into a combine capitalized at \$22,543,656 under the name of Transport Company of New York was rejected by the I. C. C. in November, 1940.

The seven lines involved operate a total of about 3,500 motor vehicles and employ between 6,000 and 7,000 persons. To avoid repetition of the methods of financing which met with I. C. C. disapproval in the Transport case, the negotiations were initiated and conducted by the operating lines themselves rather than by promoters. Also no intangible assets will be included in the new capitalization; no outside banking interests will be employed and only a limited amount of stock will be offered to the public.

The president of Associated Transport will be B. M. Seymour (who was also president of the ill-fated Transport Company) and chairman of the board will be H. D. Horton, now president of Horton Motor Lines, Charlotte, N. C. Lines to compose the new company, besides Horton, are: Consolidated Motor Lines, Hartford, Conn.; Barnwell Brothers, Burlington, N. C.; McCarthy Freight System, Taunton, Mass.; Moran Transportation Lines, Buffalo, N. Y.; Southeastern Motor Lines, Bristol Va., and Transportation, Inc., Atlanta, Ga.

N. J. Governor Submits Bills for R. R. Tax Deduction

Governor Charles Edison of the state of New Jersey submitted to the special legislative committee on railroad tax settlement on June 13 four bills which would reduce the annual tax bill of the railroads in the state by \$5,033,690 from the 1940 levy of \$18,296,690. Those seven railroads which have withheld portions of state taxes in varying ratios since 1932 would be held responsible for repayment of principal in full over a period up to 20 years. Unpaid taxes from 1932 to 1938 aggregate \$34,268,000. Penalty payments of about \$16,000,000 would, however, be waived.

As far as payments by the road are concerned, the bills follow closely recommendations made in a report by an unofficial advisory committee (comprised of a college professor, a Chamber of Commerce officer, a C. I. O. leader and an attorney) submitted to the legislature on March 5. It is in the apportionment of the future loss of revenues as between the state and the municipalities that bills differ from the report. The latter would have had the municipalities absorb about \$4,000,000 out of a total annual loss of \$5,000,000 in tax revenues; the bills split the loss evenly between the state and municipalities.

In commenting on distribution of such loss in future revenues Governor Edison expressed the opinion that such a loss is a "paper one"—"since the ability of the roads to continue to pay the full amount of levies under existing law is uncertain." Should the bills be enacted into law New Jersey's railroads would pay taxes at the rate of three per cent on property and franchises.

N. Y. C. and P. R. R. Agree on Wabash

(Continued from page 1125)

vania held substantial interest in the New Haven, the B. & M. and other eastern carriers.

"The purpose of these trust agreements," declared Mr. Dickinson in explaining the stipulations agreed upon, "would be to place the voting power in the said shares of stock in independent trustees free from any participation, control or suggestion by the Pennsylvania, the Pennsylvania Company, or the Wabash, such trusts to continue pending the sale, disposition or elimination of such stock or other order of the Interstate Commerce Commission.

"The Pennsylvania owns 217,900 shares, constituting 10.57 per cent of the outstanding capital stock of the New York, New Haven & Hartford. The Pennsylvania Company owns no shares of stock of the New Haven. The Pennsylvania has agreed with the New York Central and the Pittsburgh & Lake Erie that it will place these shares of stock of the New Haven under a trust agreement with an independent trustee."

Mr. Dickinson then went on to explain to the commission that the Pennsylvania Company owns 364,039 shares, or 30.07 per cent of the outstanding capital stock of the Lehigh Valley, while the Wabash owns 258,929 shares or 21.39 per cent of the carrier, thus giving the two roads a 51.46 per cent interest in the company.

Witnesses appearing for the Pennsylvania and the Wabash included Arthur K. Atkinson, vice-president and secretary-treasurer of the Wabash and chief financial and accounting officer of the receiver of the Wabash; H. W. Schotter, treasurer of the Pennsylvania; W. S. Franklin, vice-president in charge of traffic of the P. R. R.; and F. C. Wilkinson, superintendent, engineering, bridges, roadway and signals of the P. R. R.

Mr. Atkinson told the commission that the Pennsylvania will take all of the stock of the Wabash if the refunding bondholders decide to place the entire amount in escrow, to be sold to the P. R. R. for \$12.75 per share with one dollar of that price going to the reorganization managers to pay the expenses of the reorganization. He also felt, as did the other Pennsylvania witnesses, that the purchase of the stock of the Wabash by the P. R. R. was absolutely essential to the success of the reorganization plan.

The sole direct opposition to the proposed acquisition came from one refunding bondholder, Walter G. Peterkin, who had previously intervened in the reorganization. sylvania was not paying a sufficient amount proceeding. He complained that the Penn- for the stock and condemned the acqui-

sition, taking the position that the P. R. R. was already too large.

The fight of the New England interests was led by H. E. Foley, counsel for the Boston Port Authority, who asked the commission to grant the aforementioned subpoena. He contended that the Pennsylvania is still in New England and that that company still controls Pennroad, which, in turn, owns considerable stock of the Boston & Maine. He also called the commission's attention to the fact that it still has pending on its docket an Ex Parte investigation in No. 26286 in which it sought to determine whether or not the Pennsylvania controls Pennroad. No hearings, he said, had ever been held in that case and the New England interests wanted the matter cleared up once and for all. It was the position of the Port Authority and the Governors of Maine, New Hampshire, and Vermont that the commission should not grant the application until the Pennsylvania and Pennroad divested themselves of all their holdings in New England.

N. S. Brown, general counsel for the Wabash, and R. L. Snodgrass, counsel for the Reconstruction Finance Corporation, urged the commission to deny the motion for the investigation, holding that the withdrawal of the Pennsylvania would doom the reorganization plan of the Wabash, thus immeasurably delaying revamping of that carrier and keeping some \$16,000,000 of public funds tied up in the property.

As pointed out above, Commissioner Miller denied the motion for the subpoena, saying that such an investigation would delay for too long a period the pending application. Mr. Foley noted that an appeal would be taken to the full commission, and Examiner Molster granted a 15-day period for the filing of briefs.

I. C. C. Looks into D. & R. G. W. Stock Purchase

The question of whether or not the officers of the Denver & Rio Grande Western deceived the Interstate Commerce Commission in 1930 when that road applied for authority to assume control of the Denver & Salt Lake was brought out into the light of a public hearing before Director Sweet of the commission's Bureau of Finance on June 16. Although the issues are not entirely clear and the commission emphasized during the hearing that it was seeking only the facts, it appears that certain evidence obtained from depositions taken in civil actions filed within the last couple of years in the federal district court in New York City leads the commission to believe that it was not in possession of all the facts when in 1930 it authorized the D. & R. G. W. in Finance Docket No. 8070 to pay \$155 a share for enough shares of common stock to control the Denver & Salt Lake.

W. H. Bonneville, director of the commission's Bureau of Inquiry, handled the prosecution of the case for the I. C. C., while the debtor company was represented by W. V. Hodges and J. R. Turney. Henry McAllister, general counsel of the D. & R. G. W., appeared in his own behalf to explain his part in the stock purchases in 1929 and 1930.

Mr. McAllister told the commission that he had handled the application to the com-

mission for authority to purchase the D. & S. L. stock from the New York brokerage firm of George H. Burr & Co. and that if there was any deception practiced, the responsibility must fall on him. However, he and Mr. Hodges both denied that there had been any deception practiced on the commission by any of the parties concerned. Mr. McAllister went on to declare that no bonuses or syndicate profits had figured in the purchase of the stock for \$155 a share. He believed that the sale was a fair one and that it involved nothing more than a straight sale by the Burr firm to the D. & R. G. W.

Ditch Done Up in Defense

(Continued from page 1126)

ity of the agreement was carefully considered, Mr. Berle said; and the State Department's view in that connection was supported by the Attorney General. The situation involved, Mr. Berle went on, differs from that usually surrounding the making of a treaty in that the St. Lawrence project will affect domestic matters in greater degree than foreign affairs. In view of the important domestic phase "the considered opinion of the House of Representatives as well as that of the Senate was deemed advisable." And the Assistant Secretary of State had citations to indicate that "this is not a new and casual idea." Later he put it another way, saying that it seemed "hardly fair" to place in a minority of the Senate "the ultimate decision of a domestic matter." The joint agreement will require only majority approval of both houses of Congress, whereas a treaty would require a two-thirds vote of the Senate.

The power phase was stressed most by Mr. Berle, and he said that the Office of Production Management had requested the State Department to see if more power could be obtained in the St. Lawrence area. As for the seaway, Mr. Berle thinks that, too, should be developed at this time; but he cited the provision of the agreement which would permit it to be completed as late as 1948. He explained that when the agreement was drawn, both governments were convinced as to the immediate need for power; but it was agreed that only the development of events would provide the final answer on the seaway. Up to this point, Mr. Berle has observed no event which indicated that delay would be desirable. The seaway would bring no new obligations in connection with defense, the Assistant Secretary of State said, explaining that the United States is already committed to defending the area involved.

Witnesses at the June 18 hearing included Secretary of the Navy Frank Knox and Governor Herbert Lehman of New York. Secretary Knox told the committee that he felt the project to be "important but not vital to national defense." He also declared that its completion would answer the country's future needs rather than its present ones.

The questioning of Mr. Knox by the various members of the committee was sharp and at times highly critical. At one point in the questioning Representative Peterson told Mr. Knox that the govern-

ment would do well to show some inclination towards economy when it was asking the people to make sacrifices to buy defense bonds instead of spending hundreds of millions for projects "not vital to the national defense."

Governor Lehman also supported the project, holding that its completion was necessary to "preserve democracy in the Western hemisphere." He also denied that the project would hurt existing ports and transportation, but declared that it was necessary, even if such proved to be the case.

Meanwhile, Representatives Gehrmann, Democrat of Wisconsin, and Buckler, Farmer-Laborite of Minnesota, obtained permission to extend in the Congressional Record of June 17 their remarks in support of the project. Mr. Gehrmann's remarks were in the form of a radio address which he delivered over a nation-wide radio hook-up on June 17. In his speech he noted that much organized opposition to the project had come from the railroad unions, who, he said, felt that the railroads would be injured if the project were completed. However, he felt that such a fear had no foundation in fact.

"To support my contention," he declared, "I offer in evidence the fact that many of the presidents of the railroads of the nation have openly supported the project. The roll includes Ralph Budd, of the Chicago, Burlington & Quincy, who is now transportation expert on the defense organization for President Roosevelt; also Hale Holden, who is with the Southern Pacific and many others. This is an imposing array of names from the most progressive systems, and who favored the seaway seven years ago. It should serve to lull into security the fears of the employees. If they felt that the seaway would injure their business rather than help it, they would be opposing it with all the resources at their command."

Senate Passes Emergency Road Bill

The Senate, on June 16, passed without a record vote, S. 1580, the bill recently introduced by Senator Hayden, Democrat of Arizona, which translates into law the wishes of President Roosevelt regarding the building and strengthening of roads for emergency purposes, which were outlined in a message to the Congress, details of which were given in the *Railway Age* of June 7, page 1026.

As passed by the Senate the bill authorizes an expenditure of \$250,000,000 for the construction of access roads to military and naval reservations and industrial sites, and for the strengthening of bridges and the widening of road surfaces in key areas. The most important amendment added to the bill on the floor of the Senate was one by Senator McKellar, Democrat of Tennessee, which permits the federal government to contribute 75 per cent towards the cost of roads and the states 25 per cent instead of the regular 50-50 basis of matching funds which has been in effect for several decades.

The President in his message had asked that the funds be allocated by the War and Navy Departments; but the Senate changed this feature and restored the old method of allocation by states provided for under

the Federal Highway Act. Senator Hayden explained that the War Department did not want the responsibility of determining where the money was to be spent.

During debate on the bill, Senator Hayden, who had charge of the measure, reminded his colleagues that "during the previous war one of our greatest handicaps was the bottleneck in transportation." "The railroads," he continued, "broke down. We did not have an adequate highway system. Manufactured products could not be transported from the interior of the country to the ports, and we could not move our troops. The highway system which we have built up in the intervening 20 years makes it possible for us to carry on even though the railroads should break down, except in certain places where the roads are not wide enough and the bridges are not sufficiently strong. What we do propose to do is to widen roads and strengthen bridges in places where such improvement is needed."

I. C. C. Move Talk Causes Jitters

(Continued from page 1124)

that the Retirement Board had not up to that time framed its reply to the Bureau of the Budget; but he spoke for himself to the extent of expressing the view that it would be "calamitous" to move the Board out of Washington. Mr. Latimer added that the Board's employees are becoming so disturbed that the reports of an impending move already threaten the Board with the loss of staff members, who are thinking about other employment which will permit them to remain in the Capital. It was stated at offices of the National Mediation Board, which has only about 15 employees in Washington and thus occupies little office space, that no letter had been received from the Bureau of the Budget.

Most of the speculation about a possible new location for the commission has assumed that if a move were made it would be to the Middle West, and Chicago is the city most frequently mentioned. While section 19 of the Interstate Commerce Act provides that "the principal office of the commission shall be in the city of Washington, where its general sessions shall be held," there is now pending in Congress a resolution introduced by Representative Sabath, Democrat of Illinois, to empower the President to transfer from Washington departments, bureaus or independent agencies "whose activities can be conducted at least as efficiently and economically" in another locality. Moreover, the President now has many emergency powers embodied in laws of the "notwithstanding-the-provisions-of-any-other-statute" variety. Nevertheless, House Speaker Rayburn, who is a former chairman of the House committee on interstate and foreign commerce, predicted on June 16 that proposals to move the commission would not get the support of 10 per cent of Congress. He added that the commission was one of the agencies which had been set up specifically as agencies of Congress; and "their proper place is in Washington."

Leading the protestants against moving the I. C. C. was the House committee on

interstate and foreign commerce, which held a special meeting on June 13 and authorized Chairman Lea to write a letter of protest to the President. Protests have also gone to the White House from the National Association of Railroad and Utilities Commissioners, and from individual state commissions. While the Railway Labor Executives Association had taken no formal action, J. G. Luhrs, executive secretary, stated this week that it would be opposed to having either the commission or the Railroad Retirement Board moved. Interstate Commerce Commission practitioners located in and near Washington are naturally concerned, but the Association of Interstate Commerce Practitioners has taken no action. Neither does the Association of American Railroads contemplate any action, it was stated at the Association's offices.

Writing to President Roosevelt on June 13, Chairman Lea of the House committee on interstate commerce called the I. C. C. "the oldest and principal of all the independent commissions established as agencies of Congress," and he went on to express the committee's belief that it was "wisely" provided in the aforementioned section 19 of the Interstate Commerce Act that the commission's principal office and general sessions should be in Washington. Mr. Lea continued as follows:

"The relation of this commission to Congress, and particularly to the work of this committee, is such that its value, as a source of information and recommendation, would be greatly reduced by its removal from this city to any location not conveniently accessible to the members of Congress. In an emergency, or in case of war, one of the most important of the domestic problems in connection therewith is transportation. The commission has special functions in reference to the suspension of rules and practices as to car service, the use of terminals and priorities, and in the administering of which there is a decided advantage in Washington as the administrative center."

The aforementioned protest of the National Association of Railroad and Utilities Commissioners took the form of a telegram sent to President Roosevelt by the Association's president—James W. Wolfe, a member of the Public Service Commission of South Carolina. "On behalf of the public service commissions and other regulatory commissions of the several states," Mr. Wolfe's telegram said: "I earnestly urge that you prevent removal of the Interstate Commerce Commission from Washington." The latest bulletin from the Washington office of the Association's general solicitor, John E. Benton, states that a decision to remove the I. C. C. from Washington to Chicago "is imminent."

Discussions of the proposed move which have considered the "why-pick-on-the-commission" question have brought forth reports that New Dealers have been looking longingly at the commission's air-conditioned quarters well-located at Twelfth street and Constitution avenue. Among such gossip is that to the effect that Harry Hopkins, administrator for the lend-lease program, would find the I. C. C. building quite suitable for his operations; and this rumor gives rise to fears that Mr. Hopkins,

a close associate of the President, might be able to take over if he set out to do so.

Reports that some agencies might face demands that they move out of Washington have been turning up from time to time during the past several months; but it was not until the Budget Bureau's "show cause" letter went out that the matter was taken very seriously, at least in so far as the I. C. C. is concerned. Nevertheless the build-up for the moving idea has continued with members of Congress and civic and business associations pointing to advantages of locating in various cities.

Mediation Board Report on Richards Case

The National Mediation Board has made public an opinion in support of its previously-announced decision dismissing the protest filed by carrier members of the First and Third divisions of the National Railroad Adjustment Board against the designation of Paul W. Richards as referee to sit with the latter Board on deadlocked cases. The Board's decision was noted in the *Railway Age* of May 3, page 772, while oral argument in the proceeding was covered in the issue of April 26, page 729.

The opinion, a document of 15 typed sheets, reviews the record of the proceeding which included the complaint, the oral argument, briefs of counsel and the demurrer of Judge Richards. In leading up to its finding that the demurrer should be sustained and the charges dismissed the Board has this to say:

"The representatives of the carrier members of the Adjustment Board have urged that it is vital, if constructive railroad labor relations are to be maintained, that persons appointed as neutral referees be not only honorable and personally disinterested in the controversy, but also not generally biased or prejudiced for or against railroad management or labor as a class. With this point of view this Board fully concurs, and it has endeavored in appointing referees to select persons whom it deemed neutral in every sense of the word. Although the Board has conscientiously sought to choose as referees individuals whom both sides of the controversy would regard as satisfactory, its experience has been that a number of the persons selected have subsequently been criticized as biased and unfair by the parties against whom the decisions ran. It was in part as a result of the recurrence of objections of this type that the Board has frequently appointed as referees, Justices of State supreme courts, in the hope that their recognized standing in the community would protect them from that sort of attack.

"The Board is of the opinion that although it must seek to appoint referees who are neutral in the broadest sense, once a referee is selected he cannot be disqualified unless ineligibility for personal interest or bias is shown. This conclusion is reached not only as a matter of statutory construction, for the reasons noted above, but also because of the unfairness to the person concerned of removal from a quasi judicial position before his lack of qualifications is clearly demonstrated. The Board thinks that it is giving the parties adequate assurance of a fair hearing in this respect when

it adopts the standard for disqualification which is applicable to judges in the United States Courts. The importance of a fair and neutral referee certainly cannot be regarded as greater than the importance of a fair and neutral judge in the Courts of the United States.

"After a full consideration of the subject presented, the National Mediation Board is of opinion that no specific facts, incidents or circumstances evincing lack of neutrality or the presence of bias and partiality have been asserted by the protestants which, if proven to be true, would disqualify Justice Paul W. Richards, from a proper discharge of his duties as a neutral person sitting with the National Railroad Adjustment Board as a member thereof, under the Railway Labor Act."

Montreal Terminal Again Debated in Ottawa

The annual debate in the House of Commons at Ottawa on the conduct and policy of the Canadian National this session saw another discussion of the Montreal Terminal of that road, work on which is being progressed despite criticisms that it ought to be halted as a measure of war-time economy. Conservative leader R. B. Hanson branded as "almost criminal" the continuance of this work in wartime.

Transport Minister P. J. A. Cardin denied the charge that this Terminal work was being completed because of a promise he gave to voters in a Montreal by-election contest and said he was not ashamed of this work. He further said that the Dominion government had not forced the Canadian National into finishing the new station and declared its completion was needed to enable the publicly-owned road to get its share of freight and passenger business.

The customary motion has been made in the House at Ottawa to provide money for financing the estimated deficit of the Canadian National for the current calendar year. Finance Minister J. L. Isley has asked for \$29,414,206. Three months ago when the report of road's operations for the calendar year 1940 was made known and it was disclosed how close to balancing the books the road had come, it was predicted the road this year would, for the third time in its history, pay operating expenses and interest charges; and that it would not be forced to ask any money of Parliament. However, a large sum is yet required on capital account to complete the new terminal in Montreal and considerable new equipment is needed to handle the steadily expanding war business.

Three days was also the time necessary to have the annual report and budget of the Canadian National and allied services approved by the special committee of the House of Commons. The big reason for the limited discussion was that war activities are occupying the minds of the legislators chiefly. Another important reason is that members of the House and Senate both are recognizing the important role the railways are playing in the nation's war effort. Their prompt and efficient movement of troops and of vital munitions has made a deep impression on the people's minds. Both roads are making a favorable show of earnings and their employees now have

an application for a wage increase before a conciliation board. Its report will be ready in a short time.

Freight Car Loading

Loadings of revenue freight for the week ended June 14 totaled 862,975 cars, the Association of American Railroads announced on June 19. This was an increase of 10,035 cars, or 1.2 per cent, over the preceding week, an increase of 150,054 cars, or 21 per cent, above the corresponding week in 1940, and an increase of 229,020 cars, or 36.1 per cent, above the comparable 1939 week.

Loadings of revenue freight for the week ended June 7 totaled 852,940 cars. This was an increase of 51,157 cars or 6.4 per cent above the preceding week, which included a holiday; an increase of 150,048 cars or 21.3 per cent above the corresponding week in 1940, and an increase of 222,880 cars or 35.4 per cent above the comparable 1939 week.

The summary, as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loading			
For Week Ended Saturday, June 7			
Districts	1941	1940	1939
Eastern	184,436	149,169	133,594
Allegheny	190,233	149,871	121,117
Poconchos	57,096	47,945	42,466
Southern	121,342	97,972	92,427
Northwestern ..	132,371	114,477	99,079
Central Western ..	115,758	98,933	99,192
Southwestern ..	51,704	44,525	42,185
Total Western Districts	299,833	257,935	240,456
Total All Roads	852,940	702,892	630,060
Commodities			
Grain and grain products	35,562	28,161	34,286
Live stock	10,264	10,658	9,760
Coal	151,478	118,558	95,691
Coke	12,922	9,760	5,384
Forest products ..	42,168	34,326	29,949
Ore	78,522	66,099	43,504
Merchandise l.c.l.	159,712	148,259	153,089
Miscellaneous ..	362,312	287,071	258,397
June 7	852,940	702,892	630,060
May 31	801,783	639,120	563,309
May 24	866,017	687,480	623,542
May 17	861,277	679,065	612,888
May 10	837,149	680,628	554,644
Cumulative Total, 23 Weeks ...	17,189,231	14,720,474	13,329,907

In Canada.—Carloadings continued to increase, amounting to 65,005 cars for the week ended June 7, as against 64,981 cars for the previous week and the index number rose to a new high for the past ten years to 139.4, according to the Dominion Bureau of Statistics. Loadings a year ago amounted to 57,100 cars.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
June 7, 1941	65,005	29,409
May 31, 1941	64,981	29,413
May 24, 1941	57,242	29,232
June 8, 1940	57,100	24,146

Cumulative Totals for Canada:		
June 7, 1941	1,302,861	666,704
June 8, 1940	1,126,861	562,964
June 10, 1939	980,915	482,658

German Railroads Information Office Must Close

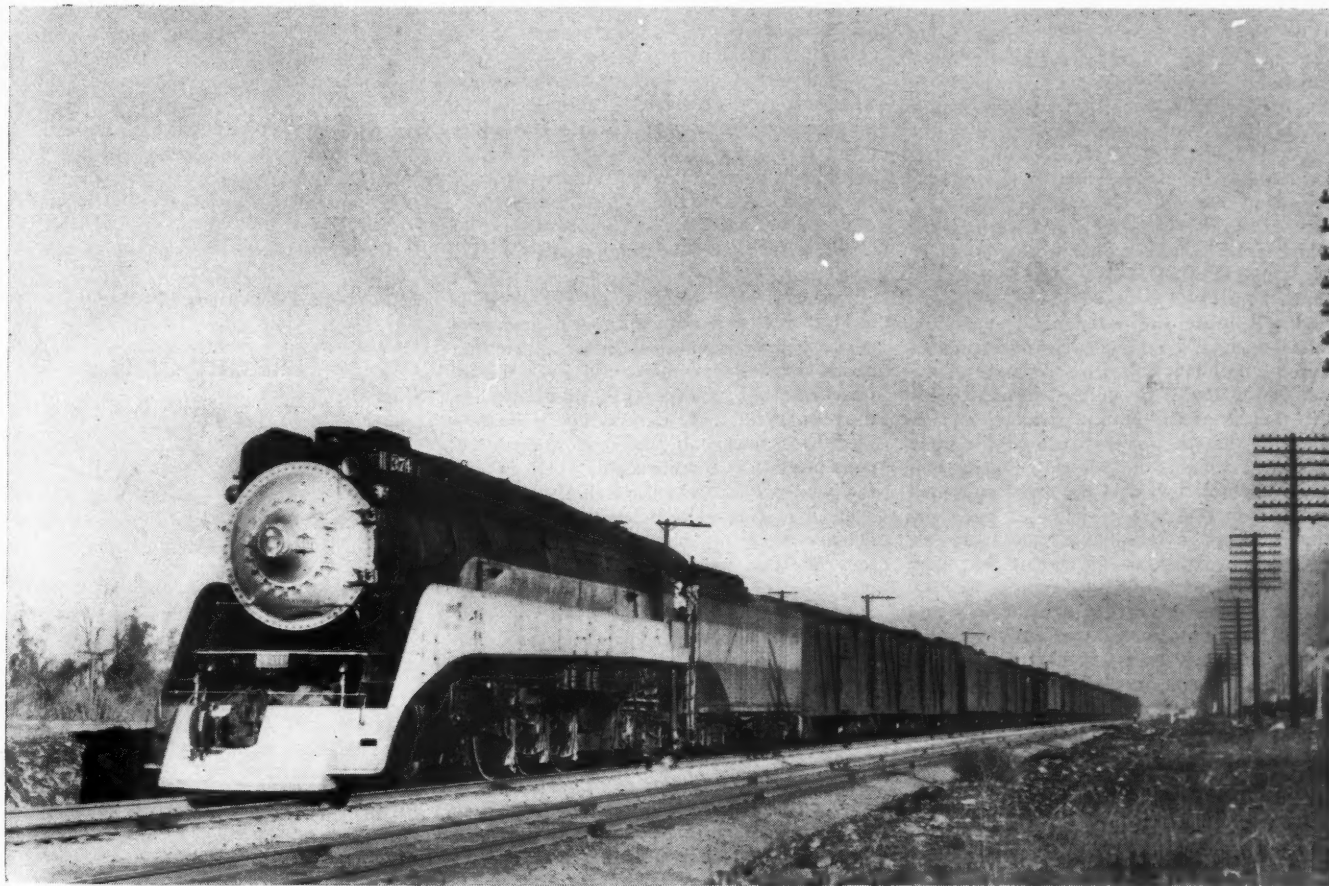
President Roosevelt's order that all German consulates and offices charged with the dissemination of Nazi propaganda must close before July 10 affects the German Railroads Information office in New York. Established shortly after the last World War to promote travel in Germany by American tourists, the office occupies three

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LIMA LOCOMOTIVE WORKS



INCORPORATED, LIMA, OHIO

floors and basement of 11 West 57th street. It has remained open up to this week, in spite of the fact that outbreak of hostilities between Germany and Great Britain has made travel abroad impossible. For the last two years it has sent out a weekly news letter entitled "News Flashes from Germany," containing short statements on non-war activities in the Reich. *Railway Age* regularly received copies marked for attention to notes on changes in railroad fares, electrification, freight traffic, etc.

Package Rates and Estimated Weights on Citrus Fruits

Suspended schedules embodying railroad proposals to abandon the use of estimated weights in computing transportation charges on citrus fruits, and to substitute therefor charges stated in amounts per package would be found not justified if the Interstate Commerce Commission adopts the recommended findings of a proposed report by Examiner Paul O. Carter. The proposed report is in I. & S. Docket No. 4786, a proceeding which arose after the commission had passed upon proposals to revise the estimated weights in I. & S. Docket No. 4511, as noted in the *Railway Age* of February 24, 1940, page 384.

The latter proceeding was reopened for further hearing along with the package-rates case, and Examiner Carter, in addition to striking down the package rates, would have the commission reaffirm the findings made in I. & S. No. 4511 "that estimated weights on citrus fruits, maintained in connection with the respective containers in which they are transported, which are less than the respective averages of actual weights of the respective loaded containers, based upon representative tests, regularly made, are unlawful; that the establishment and maintenance of estimated weights on citrus fruits on the basis of the weight of the fruit in the package, plus the weight of the empty package, is reasonable; that the maintenance of the same estimated weights for all shippers in each producing territory and the same estimated weights on different varieties of the same kind of fruit is reasonable; that respondents' test weights, to the extent that they have been used herein to compute the estimated weights prescribed, are adequate and fairly representative of the actual weights of citrus fruits transported from Florida, Texas, California, and Arizona."

Moreover, the examiner would now have the commission prescribe reasonable and non-prejudicial estimated weights and reasonable and non-prejudicial charges for the transportation of citrus fruits from those origin points to destinations throughout the country. In that connection, the proposed report said: "The determination of the matters in issue has been prolonged since the decision in the Waverly case (226 I. C. C. 647, decided March 14, 1938) by the reluctance of respondents to carry out the intent of the commission's findings clearly expressed in the reports in that case and in I. & S. No. 4511. It is apparent that definite findings respecting the bases of estimated weights and the rates to be used in connection therewith and the entry of an order giving effect to the findings made are necessary to prevent a continuation of these controversies indefinitely."

Equipment and Supplies

Pennsylvania's 1942 Equipment Program to Cost \$23,000,000

The Pennsylvania has announced that orders for new equipment to cost more than \$23,000,000 have been placed with the company's own shops for early 1942 delivery. The new program comprises 15 electric locomotives designed for both passenger and freight train service, 12 steam locomotive tenders of 21,000 gallons' capacity, 6,020 freight cars and 50 cabooses. Included in the 6,020 freight cars are the following:

2,700	55-ton	Hopper
2,000	50-ton	Box (50' 6")
500	70-ton	Gondola (52' 6")
500	70-ton	Gondola (46')
300	70-ton	Covered Hopper
10	125-ton	Flat (50')
10	125-ton	Well (51' 6")

Great Northern Spending \$48,500,000 in 1941

A system-wide maintenance, improvement and equipment program for 1941, involving an expenditure of \$48,500,000 and affording summertime employment to an additional 4,000 men, has been announced by the Great Northern. The program, which already is underway in the ten states in which the company operates, provides for:

Maintenance of way, structures and equipment—\$25,135,000.

Additional facilities and improvements to existing facilities and equipment—\$5,793,000.

Purchase of new equipment—\$17,498,000.

This year's maintenance and improvements will be a continuation of a program begun several years ago, said F. J. Gavin, president, but will cost substantially less than in 1940, and will be approximately \$1,000,000 under the average annual expenditures for maintenance work in the five-year period, 1936 through 1940. However, Mr. Gavin added that the national defense program has increased demands for cars and motive power, necessitating purchases of more new equipment than in 1940.

New equipment listed in this year's program includes: 4,000 new box cars, half of which were received the first quarter of this year, with delivery of the remaining 2,000 scheduled to begin in October (order reported in *Railway Age* of June 7); 20 Diesel-electric locomotives of varied power for switching and road service throughout the system, and 15 N-3 type steam locomotives. The latter engines are now under construction in Great Northern shops.

LOCOMOTIVES

THE FLORIDA EAST COAST is reported to be contemplating the purchase of several Diesel-electric locomotives.

THE UNITED STATES NAVY DEPARTMENT, Bureau of Supplies and Accounts, is asking for bids, June 24, on two Diesel-electric locomotives—Schedule 7477.

THE LOUISVILLE & NASHVILLE order for 12 660-hp. Diesel-electric switching locomotives was allocated four each to the

Baldwin Locomotive Works, the American Locomotive Company and the Electro-Motive Corporation, instead of three to each of these companies as reported in the *Railway Age* of June 14.

THE SOUTHERN PACIFIC is reported to be considering the purchase of an additional number of steam locomotives of the 4-8-8-2 type.

THE U. S. NAVY DEPARTMENT has ordered two 50-ton Diesel-electric switching locomotives for service at Charlestown, Mass., from the General Electric Company.

THE CENTRAL OF NEW JERSEY is inquiring for ten Diesel-electric switching locomotives comprising two of 1,000 hp. and eight of 600 hp.

THE NEW YORK, SUSQUEHANNA & WESTERN will shortly place orders for two Diesel-electric locomotives of 1,000 hp. each. This company is also seeking Federal court authority for the purchase of an additional six Diesel-electric units of 1,000 hp.

THE CANADIAN NATIONAL has ordered an additional ten 4-8-4 type steam locomotives from the Montreal Locomotive Works. These are in addition to the 25 units of this type previously ordered from the Montreal Locomotive Works and reported in the *Railway Age* of June 14.

THE GREAT NORTHERN has ordered 18 Diesel-electric locomotives as follows:

No.	Weight	Type	Ordered from
3	600-hp.	switching	Electro-Motive
8	1000-hp.	switching	Electro-Motive
2	1000-hp.	road and switching	Electro-Motive
1	2700-hp.	freight	Electro-Motive
2	4050-hp.	freight	Electro-Motive
2	1000-hp.	switching	Baldwin Locomotive Works

FREIGHT CARS

THE CENTRAL OF NEW JERSEY is inquiring for from 500 to 1,000 gondola cars of 70-tons' capacity.

THE CENTRAL OF VERMONT is reported to be contemplating the purchase of 50 box cars of 40 tons' capacity.

THE UNITED STATES WAR DEPARTMENT is asking for bids on 68 40-ton ammunition cars and 29 40-ton fire control cars.

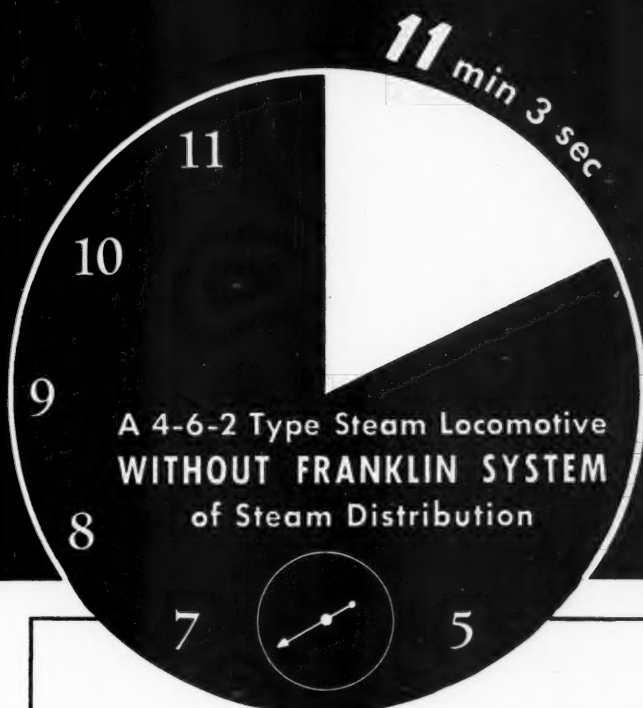
THE UNITED STATES ARMY AND NAVY MUNITIONS BOARD, Louisville Ordnance Division, has ordered four 70-ton flat cars from the Greenville Steel Car Corporation.

THE CHESAPEAKE & OHIO is reported to be in the market for 2,000 freight cars comprising 1,000 box cars of 50 tons' capacity and 1,000 hopper cars of 50 tons' capacity.

THE CHICAGO & EASTERN ILLINOIS has ordered 500 steel sheathed box cars of 50 tons' capacity from the Mt. Vernon Car Manufacturing Company. The inquiry for this equipment was reported in the *Railway Age* of May 31.

THE DELAWARE, LACKAWANNA & WESTERN is inquiring for 750 steel-sheathed box cars of 50 tons' capacity and is expected to issue an inquiry for an additional 250 gondola cars. This road was reported in the *Railway Age* of May 17 as contem-

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CHICAGO

In Canada: FRANKLIN RAILWAY SUPPLY COMPANY, LIMITED, MONTREAL

plating the purchase of 1000 box and 500 gondola cars.

THE WABASH has ordered 15 cement cars of 70 tons' capacity from the General American Transportation Corporation, and is inquiring for 100 52-ft. 6-in. drop-end gondola cars with wood floors of 70 tons' capacity.

THE NEW YORK CENTRAL is reported to have placed an order for a total of 1,500 freight cars with Despatch Shops, Inc., as follows:

750	40' 6"	50-ton	Box
250	50' 6"	55-ton	Box
300	52' 6"	70-ton	Gondola
200	65' 6"	70-ton	Gondola

Inquiry for this equipment was reported in the *Railway Age* of May 31.

IRON AND STEEL

THE READING has ordered 7,000 tons of rails from the Bethlehem Steel Company.

THE LEHIGH & NEW ENGLAND has ordered 1,725 tons of rails from the Bethlehem Steel Company.

Construction

ERIE AND BALTIMORE & OHIO.—A contract amounting to \$497,442 has been awarded the Lombardo Brothers Construction Company, Cleveland, Ohio, by the Ohio Department of Highways for a grade separation project on State Highway No. 501 in Richland County, Ohio. The project includes a grade separation structure under two tracks of the Erie and an overhead highway bridge over the B. & O. and Touby's Run.

The Erie bridge will consist of two through plate girder double-track spans, each 84 ft. long, designed for Coopers E-70 loading and built on a 64 deg. skew. It will have a steel plate floor and will rest on a concrete pier and concrete abutments. The bridge over the B. & O. and Touby's Run will consist of four continuous steel beam spans, 72 ft., 90 ft., 90 ft., and 72 ft. long, with a concrete deck resting on concrete piers and abutments. This bridge will be built on a skew of 44 deg., and will provide a roadway 56 ft. wide, with 4-ft. sidewalks.

NEW YORK CENTRAL.—The Pennsylvania Public Utility Commission has approved plans calling for the abolition of a crossing at grade where State Highway Route No. 213 crosses this company's single main track at Camp Perry in the township of Perry, Mercer county, Pa. The general plan provides for reconstruction of a portion of the State Highway and the construction of a plate girder bridge to carry the highway above the grade of the track. The bridge will consist of three spans, each 64 ft. in length, and one span, 38 ft. in length. The superstructure, supported upon reinforced concrete piers and abutments, will provide a reinforced concrete roadway 26 ft. in width and one sidewalk 5 ft. in width. Total cost of the improvement, which the Department of

Highways intends to undertake as a Federal Aid Grade Crossing Elimination Project, is estimated at \$172,771.

SOUTHERN.—An inspection pit, drop pit, fuel oil and water facilities, a shed workshop and a pump-house are being constructed at Danville, Ky., with company forces at a total cost of approximately \$50,000.

Supply Trade

R. M. Cleveland has been appointed manager of the Boston, Mass., office of the Worthington Pump & Machinery Corporation, to succeed W. A. Finn, who has been called to active duty with the United States Navy.

Frank A. Watkins, vice-president and treasurer of the Mather Humane Stock Transportation Company, Chicago, has been elected president to succeed Alonzo C. Mather, who died on January 25. Mr.



Frank A. Watkins

Watkins was born in Fairfield, Herkimer County, N. Y., and is a graduate of the Albany (N. Y.) Academy and Amherst College. He was secretary of the S. G. Taylor Chain Company from 1901 to 1913, and joined the Mather organization in the latter year, as treasurer. In 1935 he was elected vice-president and treasurer. He is a director of the Taylor Chain Company and the Mineral Insulation Company. Mr. Watkins is the second president in the Mather Company's 60 years of existence, Mr. Mather having served in that capacity from 1881, when he founded the company, until his death.

OBITUARY

L. James Rinkar, sales engineer of the Electric Railway Improvements Company, Cleveland, Ohio, died on May 31 after an illness of one week.

Robert L. Cairncross, district sales manager of the National Lock Washer Company, Newark, N. J., with headquarters at Chicago, died in Tucson, Ariz., on June 13.

Financial

ATLANTIC & EAST CAROLINA.—Notes.—This company has asked the Interstate Commerce Commission for authority to issue three notes totaling \$225,000. The \$25,000 note will run for six months and will bear interest at the rate of five per cent, while the \$50,000 and the \$150,000 notes will carry a three per cent interest rate and will mature in 120 equal monthly payments.

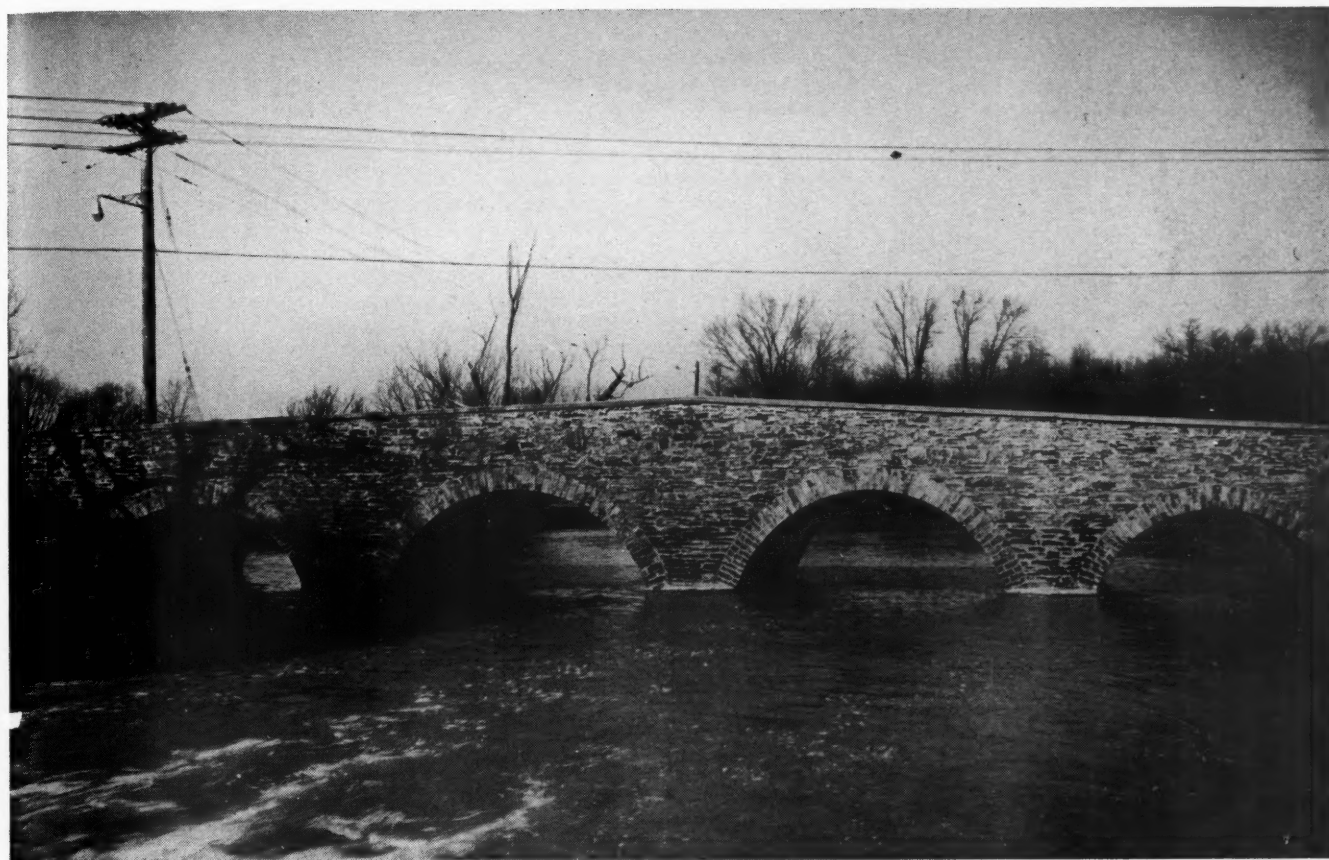
ATLANTIC COAST LINE.—Equipment Trust Certificates.—This company has been authorized by Division 4 of the Interstate Commerce Commission to assume liability for \$7,880,000 of 2½ per cent serial equipment trust certificates, maturing in 10 equal annual installments of \$788,000 on July 1 in each of the years from 1942 to 1951, inclusive. The issue has been sold at 100.399 to Salomon Brothers & Hutzler and associates, making the average annual cost to the company approximately 2.04 per cent.

CHICAGO & EASTERN ILLINOIS.—Receivership.—The district court at Chicago on June 16 signed the final decree which declared the Chicago & Eastern Illinois out of its eight year receivership, and discharged the trustee.

ERIE.—Reorganization Managers.—The district court at Cleveland, Ohio, on June 17, confirmed designation of five reorganization managers for the Erie. The managers have full power, under court supervision, to put into effect the railroad's reorganization plan, replace old securities with the new issues provided by the plan and appoint directors. Stockholders will have an opportunity to vote upon the directors within 120 days of their appointment, which is not expected for several months. The managers are J. K. Thompson, vice-president of the Erie at Cleveland; Frank C. Wright, a representative of the Reconstruction Finance Corporation; Harry C. Hagerty, of the Metropolitan Life Insurance Company; John W. Stedman, of the Prudential Insurance Company, and Henry S. Sturges, vice-president of the First National Bank of New York.

FLORIDA EAST COAST.—Compensation of Officers.—Division 4 of the Interstate Commerce Commission has ordered that salaries of \$22,000, \$7,000, and \$12,000, respectively, be paid to Scott M. Loftin and Edward W. Lane as trustees and Russell L. Frink as counsel to the trustees in reorganization proceedings under section 77 of the Bankruptcy Act.

GRAND TRUNK WESTERN.—Equipment Trust Certificates.—This company has asked the Interstate Commerce Commission to approve a plan whereby it would issue and sell to the Reconstruction Finance Corporation \$5,692,000 of 2½ per cent equipment trust certificates, maturing in 20 semiannual installments on June 1 and December 1 in each of the years from 1942 to 1951, inclusive. The proceeds will be used as part of the purchase price of new equipment costing a total of \$7,116,150 and consisting of 25 U-3-b northern type steam



COLONIAL STONE BRIDGE

KINGSTON, N. J.

Following the battle of Princeton on January 3, 1777, General Washington and his army crossed this bridge which was then destroyed to delay the British. On the heights above the bridge, American artillery successfully prevented the crossing by the British and enabled the Continentals to retire to the safety of the Jersey hills at Jockey Hollow. The present bridge was built, shortly after the Revolutionary War, to replace the one destroyed.

* * * * *

The Security Sectional Arch which was introduced to the railroads by American Arch Com-

pany engineers 32 years ago has not had as turbulent a history as did this colonial stone bridge yet it has played a comparably important part in modern railroad history. Prior to its introduction railroads each had their own design of arch construction which resulted in a decided loss due to out of service time of the locomotives. After its introduction the Security Sectional Arch received such widespread acceptance by the railroads as a factor in facilitating both re-ordering and standardizing arch brick that today it is the standard of American railroads. The original design has been continuously improved to keep pace with modern steam locomotive power.

There's More to SECURITY ARCHES Than Just Brick

**HARBISON-WALKER
REFRACTORIES CO.**

Refractory Specialists



**AMERICAN ARCH CO.
INCORPORATED**

60 EAST 42nd STREET, NEW YORK, N. Y.

***Locomotive Combustion
Specialists***

locomotives; 20 Diesel-electric locomotives; 300 all-steel, 40-ton automobile cars; 200 all-steel, 70-ton gondola cars; and 100 all-steel, 70-ton flat cars.

MINNEAPOLIS, NORTHFIELD & SOUTHERN.—*Bonds.*—This company has been granted authority by Division 4 of the Interstate Commerce Commission to extend from September 1, 1941, to September 1, 1956, the date of maturity of \$525,000 of six per cent, first mortgage gold bonds, series A, to bear interest during the extended period at the rate of five per cent.

NASHVILLE, CHATTANOOGA & ST. LOUIS.—*Equipment Trust Certificates.*—This company has asked the Interstate Commerce Commission for authority to assume liability for \$4,290,000 of equipment trust certificates, maturing in 10 equal annual installments of \$429,000 on July 15 in each of the years from 1942 to 1951, inclusive. The proceeds will be used as part of the purchase price of new equipment costing a total of \$4,766,667 and consisting of 10 4-8-4 steam locomotives; four 660 h. p. Diesel-electric switching locomotives; two 1,000 h. p. Diesel-electric switching locomotives; 500 steel-sheathed, wood-lined box cars of 40 tons capacity; 200 all-steel hopper coal cars of 50 tons capacity; and 300 all-steel, solid bottom gondola cars of 50-ton capacity.

This issue was offered publicly on June 19 by the Equitable Securities Corporation at prices to yield 0.40 to 2.50 per cent, according to maturity. Equitable was awarded the issue on a bid of 100.17 for 2½s, representing an interest cost to the railroad of approximately 2.088.

NEW YORK, CHICAGO & ST. LOUIS.—*Pledge of Bonds.*—This company has been granted authority by Division 4 of the Interstate Commerce Commission to

1. Extend from July 1, 1941, to July 1, 1951, the maturity date of \$3,625,000 of Lake Erie & Western second mortgage, five per cent bonds;

2. Assume liability as primary obligor for the extended bonds; and

3. Pledge and repledge to and including June 30, 1943, all or any part of the extended bonds as collateral security for any short-term notes which it may decide to issue.

NEW YORK, CHICAGO & ST. LOUIS.—*L. E. & W. Bonds.*—Smith, Barney & Co., New York, is notifying holders of outstanding second mortgage five per cent bonds of the Lake Erie & Western, a constituent company of this road, that it will purchase any bonds of this issue at a price of 100 per cent of principal amount and accrued interest to date of purchase if presented before July 1 and without interest if presented on or after that date. The offer will remain open until close of business, August 28, 1941. By agreement with the railroad, Smith, Barney & Co. will enter into extension agreements effecting the extension of the bonds for a term of ten years from July 1, 1941.

NEW YORK CENTRAL.—*Equipment Trust Certificates.*—This company has asked the Interstate Commerce Commission for authority to assume liability for \$15,000,000

of equipment trust certificates, maturing in 10 equal annual installments of \$1,500,000 on July 15 in each of the years from 1942 to 1951, inclusive. The proceeds will be used as part of the purchase price of new equipment costing a total of \$16,808,333 and consisting of 4,000 55-ton steel box cars; 1,000 70-ton, high side, gondola cars; 15 oil-electric switching locomotives; and 15 L-3c Mohawk type freight locomotives.

NORTHERN PACIFIC.—*Equipment Trust Certificates.*—This company has asked the Interstate Commerce Commission for authority to assume liability for \$5,700,000 of equipment trust certificates, maturing in 10 equal annual installments on July 15 in each of the years from 1942 to 1951, inclusive. The proceeds will be used as part of the purchase price of new equipment costing a total of \$6,425,000 and consisting of 1,850 steel-sheathed box cars and 200 all-steel, 70-ton selective ballast cars.

SOUTHERN.—*Equipment Trust Certificates.*—This company has been authorized by Division 4 of the Interstate Commerce Commission to assume liability for \$11,250,000 of two per cent serial equipment trust certificates, maturing in 10 equal annual installments of \$1,125,000 on July 1 in each of the years from 1942 to 1951, inclusive. The issue has been sold at 100.1779 to a group comprised of Harriman Ripley & Co., Inc., Blyth & Co., Inc., Drexel & Co., Lazard Freres & Co., Kidder, Peabody & Co., Union Securities Corporation, Alex. Brown & Sons, and White, Weld & Co., making the average annual cost to the company approximately 1.96 per cent.

SOUTHERN PACIFIC.—*Equipment Trust Certificates.*—This company has been authorized by Division 4 of the Interstate Commerce Commission to assume liability for \$14,625,000 of 2¾ per cent equipment trust certificates, maturing in 15 equal annual installments of \$975,000 on June 1 in each of the years from 1942 to 1956, inclusive. The issue has been sold at 99.568 to the First Boston Corporation, acting on behalf of itself and associates, making the average annual cost to the company approximately 2.31 per cent.

TEXAS, OKLAHOMA & EASTERN.—*Deficit Status.*—Division 4 of the Interstate Commerce Commission has found that this company earned a net railway operating income in excess of 5¾ per cent per year on the value of its property and is not entitled to reimbursement under the provisions of section 204 of the Transportation Act of 1920, as amended January 7, 1941, for any losses suffered during the period of federal control. Division 4 found that the period of private operation under federal control was 20.17 months, which would entitle the company to earn income at the rate of 9.66 per cent for the period, whereas it earned at the rate of 14.6 per cent. An order was entered dismissing the carrier's claim.

Average Prices of Stocks and Bonds

	June 17	Last week	Last year
Average price of 20 representative railway stocks..	28.87	29.02	27.18
Average price of 20 representative railway bonds..	64.55	64.70	53.06

Railway Officers

EXECUTIVE

Roger S. B. Hartz, special representative in the office of the senior vice-president of the Baltimore & Ohio, with headquarters at Baltimore, has been promoted to assistant to senior vice-president. Mr. Hartz was born in Palmyra, Pa., on September 27, 1888, and was graduated from Lebanon Valley College with a B.A. degree in 1908, and from Cornell University as civil engineer in 1913. He went to Bal-



Roger S. B. Hartz

timore in 1913 and while engaged in the engineering construction business was commissioned second lieutenant, Cavalry, United States Army, serving four years on the Mexican border patrol and one year abroad during the World War. He resigned his commission as lieutenant colonel, Field Artillery, on October 31, 1919, continuing in the same rank in the organized reserves and being promoted to colonel in the Field Artillery Reserves on January 18, 1939. Mr. Hartz became special representative in the office of the senior vice-president of the Baltimore & Ohio in 1923, continuing in that capacity until his recent promotion.

Colonel L. L. Morton, assistant general manager of the Louisville & Nashville, has been promoted to assistant vice-president and assistant general manager in charge of engineering and roadway, and also director of personnel, with headquarters as before at Louisville, Ky. **Rolla C. Parsons**, assistant vice-president and director of personnel, has been appointed assistant vice-president and assistant general manager-transportation-mechanical.

Mr. Parsons was born at Livingston, Ky., on July 15, 1890, and entered railway service as a telegraph operator on the L. & N. in October, 1905. From March 15, 1907, to July 1, 1911, he worked as a telegraph operator on various other railroads, returning to the L. & N. on the latter date as a telegraph and copying operator in the dispatcher's office at Earlington, Ky. On April

Continued on next left-hand page

THE SUPERHEATER AS A FACTOR IN LOCOMOTIVE DESIGN

Heating Surface and Boiler Capacity

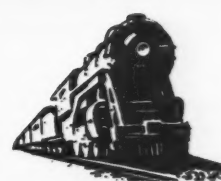
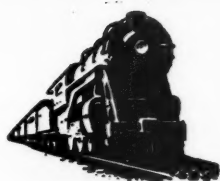
High sustained boiler capacity with highest boiler efficiency requires, among other things, a boiler with the largest heating surface within clearance limits.

The tabulation below compares two typical boilers in actual service with the same outside diameter and length, one designed for the type "A" superheater and the other for the type "E" superheater.

The increase in evaporating surface, made possible with the type "E" superheater design in the same size of boiler, is quite substantial.

An increase of from 8% to 14% in evaporating surface, and from 50% to 80% in superheating surface is usually possible.

ITEM	TYPE "A" Superheater	TYPE "E" Superheater	INCREASE	INCREASE Per Cent
Tube and flue heating surface	4,200 sq. ft.	4,641 sq. ft.	441 sq. ft.	10.5
Superheating surface	1,164 sq. ft.	2,088 sq. ft.	924 sq. ft.	79.3
Gas area	1,337 sq. in.	1,374 sq. in.	37 sq. in.	2.76
Steam area	51.3 sq. in.	67.06 sq. in.	15.76 sq. in.	30.7



SUPERHEATERS • FEEDWATER HEATERS
AMERICAN THROTTLES • STEAM DRYERS
EXHAUST STEAM INJECTORS • PYROMETERS

THE
SUPERHEATER
C O M P A N Y

Representative of
AMERICAN THROTTLE COMPANY, INC.
60 East 42nd Street • NEW YORK
122 S. Michigan Avenue • CHICAGO
• • •
Montreal, Canada
THE SUPERHEATER COMPANY, LTD.

1, 1913, he was promoted to dispatcher on the Henderson division and later served as dispatcher at various other points. On May 1, 1917, he was advanced to assistant and night chief dispatcher on the Eastern Kentucky division and the following year he



Rolla C. Parsons

was promoted to assistant trainmaster. Mr. Parsons was appointed system car dispatcher in the office of the superintendent of transportation at Louisville on July 1, 1920, and on March 1, 1923, he was appointed chairman of the Mine Rating Bureau at Louisville. On May 6, 1929, he was advanced to assistant superintendent of transportation and on March 10, 1931, he was further promoted to superintendent of transportation. Mr. Parsons was appointed superintendent of transportation and director of personnel on August 16, 1936, and on June 1, 1937, he was promoted to assistant vice-president and director of personnel, which position he held until his recent promotion, effective June 6. Mr. Parsons is a member of the executive committee of the Bureau of Information of the Southeastern Railroads and also of the National Railroad Adjustment Board.

Colonel Morton was born at Mt. Eden, Ky., on April 2, 1884, and graduated in civil engineering from Centre College in 1905. He entered railway service in June, 1906, in the engineering department of the Atlanta, Birmingham & Atlantic (now the Atlanta, Birmingham & Coast). He left this road in 1909, to become an assistant engineer on the Kansas City Southern at Texarkana, Tex., and in 1912 he accepted a similar position in the office of the chief engineer of the Louisville & Nashville. During the World War, Col. Morton served successively in the United States Army as captain, major and lieutenant-colonel of engineers. He returned to the service of the L. & N. in 1919, and in 1920 he was made a special engineer at Louisville, Ky. Eight years later, he was promoted to superintendent of the New Orleans and Mobile division, with headquarters at New Orleans, La., and in June, 1931, when this division was combined with the Montgomery division, under the name of the Montgomery and New Orleans division, he was appointed superintendent of the new division, with headquarters at Mobile. On October 15, 1931, Col. Morton was advanced to assistant general manager,

with headquarters at Louisville, Ky., the position he held until his recent promotion.

FINANCIAL, LEGAL AND ACCOUNTING

W. L. Schoettler, assistant commissioner, land and tax department, on the Great Northern, has been promoted to right of way, land and tax commissioner, with headquarters as before at St. Paul, Minn.

R. P. Smith has been appointed assistant freight claim agent of the Denver & Rio Grande Western, with headquarters at Denver, Colo., succeeding **Louis F. Dickinson**, whose promotion to freight claim agent was reported in the *Railway Age* of May 31.

Carson L. Taylor, commerce counsel for the Chicago, Milwaukee, St. Paul & Pacific, has been promoted to general attorney and commerce counsel, with headquarters as before at Chicago. **William L. Hunter**, assistant general solicitor, has been appointed assistant commerce counsel. **Edwin R. Eckersall**, assistant general attorney, has been appointed assistant general solicitor, and **Larry H. Dugan**, chief clerk, has been advanced to assistant general solicitor.

Louis F. Dickinson, whose promotion to freight claim agent of the Denver & Rio Grande Western, with headquarters at Denver, Colo., was reported in the *Railway Age* of May 31, was born at Troy, Ala., on October 15, 1889, and entered railway service in April, 1906, with the Central of



Louis F. Dickinson

Georgia, later serving the Seaboard Air Line, the Atlantic Coast Line and the Western Railway of Alabama in various capacities, including those of telegrapher, station agent, bill clerk, rate clerk and accountant. On March 19, 1913, he went with the D. & R. G. W. in the freight claim office as loss and damage claim investigator. In October, 1918, after a brief period of service in the U. S. Army, Mr. Dickinson was appointed chief clerk in the freight claim office and on December 1, 1925, he was advanced to assistant freight claim

agent, which position he held until his recent promotion effective June 1.

OPERATING

Charles B. MacLellan has been appointed safety supervisor on the Southern Pacific, with headquarters at Los Angeles, Cal.

Ralph C. Klein, supervisor passenger transportation of the Reading-Central of New Jersey, has been appointed assistant superintendent transportation, succeeding **C. E. Montgomery**, who retired on April 1.

The title of **G. M. Cordingley**, transportation assistant on the Saskatchewan district of the Canadian Pacific, has been changed to supervisor of transportation, with headquarters as before at Moose Jaw, Sask.

A. C. Morrissey, chief dispatcher on the Chicago, Milwaukee, St. Paul & Pacific at Beloit, Wis., has been promoted to trainmaster at Beloit, succeeding **G. H. Lane**, who has been transferred to Terre Haute, Ind.

H. H. Garrigues, former chief engineer maintenance of way of the Eastern region of the Pennsylvania, who has been on leave of absence because of illness since October, 1940, has been appointed assistant to the general manager of the Eastern region, with headquarters at Philadelphia, Pa.

Karl C. Shults, trainmaster on the Southern at Oakdale, Tenn., has been transferred to Birmingham, Ala. **William H. Oglesby**, trainmaster at Selma, Ala., has been transferred to Oakdale, succeeding Mr. Shults, and **Robert J. Stone** has been appointed trainmaster at Selma, relieving Mr. Oglesby.

D. T. Ayers, car service agent of the Southern Pacific, has been promoted to superintendent of freight car service, a newly created position, with headquarters as before at San Francisco, Cal., and **W. H. McClymonds**, assistant car service agent at San Francisco, has been advanced to car service agent, with the same headquarters, succeeding Mr. Ayers.

J. R. Burns, day trainmaster on the Memphis terminal of the Illinois Central, has been promoted to assistant superintendent in charge of that terminal, a newly created position with headquarters as before at Memphis, Tenn. **A. B. Holt**, night trainmaster on the Memphis terminal, has been appointed day trainmaster, succeeding Mr. Burns, and **L. G. Trotter**, chief yard clerk at Memphis, has been advanced to night trainmaster, relieving Mr. Holt.

Don K. Price, superintendent of the Louisville division of the Louisville & Nashville, with headquarters at Louisville, Ky., has been promoted to assistant superintendent of transportation, with the same headquarters, and **C. D. Love**, division master mechanic at Nashville, Tenn., has



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DEPENDABLE STRENGTH

THEY not only protect engine service and availability under high speeds and intensive utilization — but their high quality safeguards against high maintenance and operating costs.

AMERICAN LOCOMOTIVE COMPANY • NEW YORK, N. Y.

been promoted to superintendent of the Louisville division, succeeding Mr. Price.

ENGINEERING AND SIGNALING

Samuel R. Hursh, acting chief engineer maintenance of way of the Eastern region of the Pennsylvania, has been appointed chief engineer of maintenance of way of the Eastern region.

N. J. Law, Jr., a supervisor of track, bridges and buildings of the Columbus & Greenville, with headquarters at Columbus, Miss., has resigned to go with the Terminal Railroad Association of St. Louis, as assistant engineer, with headquarters at St. Louis, Mo., and **Lloyd T. Casson**, formerly with the U. S. Engineer Corps in the Mobile district, has been appointed resident engineer of the T. R. R. A. at St. Louis.

Anthony Francis Dorley, whose retirement as principal assistant engineer on the Missouri Pacific, with headquarters at St. Louis, Mo., was reported in the *Railway Age* of June 7, was born at Lancaster, Pa., on April 8, 1875, and graduated from Mt. St. Mary's College, Emmitsburg, Md., in 1893, and the School of Engineering, Notre Dame University, in 1900. He entered railway service on June 20, 1900, as a rodman on the Baltimore & Ohio Southwestern (now the B. & O.) and in January, 1901, he went with the Cleveland, Cincinnati, Chicago & St. Louis (Big Four) as an assistant engineer, later returning to the B. & O. Southwestern as an assistant engineer. In April, 1903, he was promoted to assistant division engineer at Washington, Ind., and on April 2, 1906, he went with the Missouri Pacific as an assistant engineer. Mr. Dorley was promoted to division engineer at Kansas City, Mo., three months later and then was transferred successively to Omaha, Neb., Osawatimie, Kan., and back to Kansas City. In December, 1910, he was promoted to engineer of



Anthony Francis Dorley

water service, with headquarters at St. Louis, and in October, 1913, he was advanced to principal assistant engineer. In June, 1915, he was appointed engineer maintenance of way of the Eastern district, with headquarters as before at St. Louis, and in July, 1926, when the positions of district engineers of maintenance of way

were abolished, he was re-appointed principal assistant engineer, his duties being related to new railroad construction, improvement projects and highway crossing matters. Mr. Dorley has been an active member of the American Railway Engineering Association for many years, and served as chairman of the committee on Water Service from 1915 to 1925.

Charles H. Hitchcock, engineer grade crossings of the Reading Company, with headquarters at Philadelphia, Pa., will retire on June 30, after more than 49 years of service with this company. Mr. Hitchcock was born on May 24, 1873, at Philadelphia, and after a public school education he entered railway service with the Reading in November, 1891, serving as a rodman, levelman and transitman. In 1900, Mr. Hitchcock left this company to go with the Cuban Steel Ore Company as engineer in charge of a large terminal construction project in Cuba. In November, 1901, he returned to the Reading as a draftsman, later becoming an inspector. On July 1, 1904, Mr. Hitchcock became an assistant engineer, which position he held until December 31, 1926, when he was promoted to design engineer. Subsequently he was advanced to engineer of grade crossings, holding this position until his retirement.

TRAFFIC

Douglas E. Dahlgren, traveling agent for the Minneapolis & St. Louis at Chicago, has been promoted to general agent at San Francisco, Cal.

Daniel J. Shea, traveling freight agent for the Chicago & North Western at St. Paul, Minn., has been promoted to general agent at Fargo, N. D., a newly created position.

P. E. Geil, manager of merchandise traffic of the Gulf, Mobile & Ohio, has been promoted to passenger traffic manager, effective June 1, with headquarters as before at Mobile, Ala.

Gregory C. Gormaly, general western agent for the Quaker Line, has been appointed general agent for the Akron, Canton & Youngstown and the Northern Ohio at Chicago, succeeding **R. J. McMillan**, who has been transferred to Akron, Ohio.

John E. Hayden, representative of the coal traffic department of the Delaware, Lackawanna & Western, has been promoted to coal freight agent, with headquarters at New York. Mr. Hayden was born in Brooklyn, N. Y., and attended St. John's Preparatory School and St. John's College, Brooklyn. He entered the service of the Lackawanna in April, 1925, as a stenographer in the general freight department, subsequently serving in various capacities in that department until July, 1933, when he was appointed chief clerk of the coal traffic department. In May, 1940, Mr. Hayden was advanced to representative and assigned to the soliciting of coal traffic.

Stanton Curtis, general passenger agent of the Gulf, Mobile & Ohio, with head-

quarters at Mobile, Ala., will retire after 46½ years of railroad service on June 30. Mr. Curtis entered railway service in January, 1895, as a clerk to the ticket accountant on the Michigan Central at Detroit, Mich. After serving in a clerical capacity on various railroads, he became, in January, 1903, a clerk in the general passenger office of the Southern at Washington, D. C. In September, 1905, he was promoted to passenger agent at Norfolk, Va., and in March, 1907, he was appointed chief clerk to the assistant general passenger agent at Chicago. Mr. Curtis was advanced to northwestern passenger agent, with the same headquarters, in December, 1909, and in September, 1913, he was appointed assistant general passenger agent at Chicago. In January, 1917, he was appointed division passenger agent at St. Louis and in March, 1920, he went with the Mobile & Ohio as general passenger agent, with headquarters at St. Louis. In 1939, he was appointed also general passenger agent of the Gulf, Mobile & Northern, with headquarters at Mobile, and when the consolidation of the M. & O. and the G. M. & N. was completed to form the Gulf, Mobile & Ohio, he continued as general passenger agent of that road, with headquarters at Mobile.

MECHANICAL

Frederick T. H. James, master mechanic of the Morris and Essex division of the Delaware, Lackawanna & Western, with headquarters at Hoboken, N. J., has



Frederick T. H. James

been promoted to assistant to chief of motive power, with headquarters at Scranton, Pa. **James Purcell**, foreman of the car department of the Morris and Essex division, succeeds Mr. James as master mechanic. Mr. James was born on March 16, 1894, at Buffalo, N. Y., where he attended the public schools and studied the machine shop practice course of the Y. M. C. A. Following a business college course, he entered civil service. From 1906 to 1909, he served an apprenticeship and in September, 1909, became an enginehouse utility worker on the Lackawanna at East Buffalo. For some months in 1911, Mr. James was assigned to the master mechanic's office in connection with the compilation of special locomotive performance reports, later be-

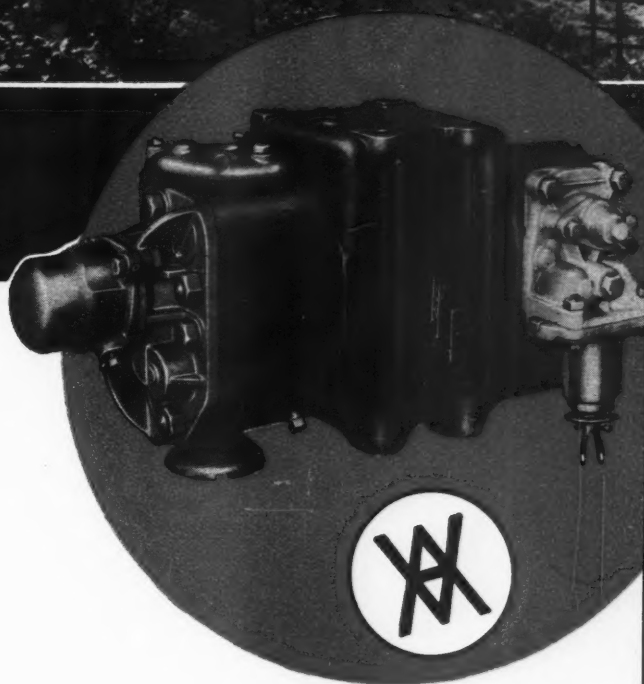
Maximum Benefits

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Obtainable only with
... "AB" Brakes

MANY and varied are the modern improvements that combine to increase operating efficiency, reduce transportation costs, and provide a better service for shippers . . . Larger car capacity, longer trains, more powerful locomotives, higher speeds—all contribute to this end, but the air brake on each individual car is also a vital factor. The superior control of the AB Brake, when available for every car in a train, serves to unify these improvements, making possible the full realization of their potential benefits. For current intensive operating requirements, this brake alone is functionally and mechanically suitable.



Many leading railroads, having proved this fact by experience, are expediting the conversion of cars now in service to the end that all their trains will be entirely equipped with AB Brakes—a worthwhile precedent for others to follow.

WESTINGHOUSE AIR BRAKE CO.

WILMERDING, PENNSYLVANIA

ing promoted to coal chute foreman at the East Buffalo enginehouse, and then acting as a machinist at the East Buffalo locomotive shop. He became general foreman at Groveland, N. Y., in October, 1915, and erecting shop foreman at East Buffalo in February, 1918. Mr. James then served in various positions until February, 1923, when he was assigned to the Buffalo division as special locomotive and boiler inspector. On November 1, 1923, he was transferred to Binghamton, N. Y., as day enginehouse foreman and on February 18, 1924, was promoted to general foreman at the Kingsland, N. J., locomotive shop. Mr. James became master mechanic of the Morris and Essex division in May, 1939, the position he held until his recent promotion.

F. A. Longo has been appointed general boiler inspector on the Southern Pacific, with headquarters at San Francisco, Cal.

Pedro C. Morales has been appointed general superintendent of motive power and machinery of the National Railways of Mexico, with headquarters at Mexico City, D. F., succeeding **Pedro Angelini**, who has been appointed assistant general superintendent of motive power and machinery. Mr. Morales held this position previously, but was pensioned against his will in 1937.

PURCHASES AND STORES

J. W. Hagerty, assistant purchasing agent for the Pennsylvania at Chicago, has been appointed also purchasing agent of the Indianapolis Union Railway, succeeding **G. H. Schultz**.

George E. Wilson, assistant chief clerk in the purchasing department of the Reading, has been appointed assistant purchasing agent, succeeding the late **Charles N. Linson**.

Clarence S. Burt, general tie and treatment inspector of the Illinois Central, with headquarters at Grenada, Miss., has been promoted to manager, forest products bureau, with headquarters at Memphis, Tenn., succeeding **William A. Summerhays**, who has been granted a leave of absence to serve with the Association of American Railroads and the Office of Production Management at Washington, D. C. **Charles S. Sizemore**, chief clerk in the forest products bureau at Memphis, has been appointed assistant manager of that bureau, a newly created position, with the same headquarters, and **Floyd Ray**, tie inspector at Grenada, has been appointed treatment supervisor, with the same headquarters.

A. W. Hix, whose promotion to assistant general purchasing agent of the Chesapeake & Ohio, the New York, Chicago & St. Louis (Nickel Plate) and the Pere Marquette, with headquarters at Cleveland, Ohio, was reported in the *Railway Age* of June 7, was born at Bramwell, W. Va., in 1893, and entered railway service on November 24, 1908, as stenographer to the storekeeper on the C. & O., at Richmond, Va. In February, 1910, he was appointed stenographer to the assistant chief clerk and, after serving in various clerical

positions, was promoted to assistant to the director of purchases and stores at Richmond in April, 1922. Mr. Hix was transferred to Cleveland in August, 1929, to serve both the C. & O. and the Pere Marquette in the same capacity and in 1931 he was promoted to office manager for the assistant vice-president of the C. & O. and the Pere Marquette. Two years later he was appointed office manager for the vice-president of the C. & O. and in July, 1936,



A. W. Hix

he was advanced to assistant to the chief purchasing and stores officer of the C. & O., the Nickel Plate and the Pere Marquette, which position he held until his recent promotion, effective June 1.

SPECIAL

Dr. Herbert M. Long has been appointed chief surgeon of the New York Central system, with headquarters at Pittsburgh, Pa., succeeding **Dr. George R. Winters**, deceased.

OBITUARY

B. F. Fuller, manager of dining car service of the Atlantic Coast Line, with headquarters at Wilmington, N. C., died on June 7 at Richmond, Va., at the age of 47.

Paul H. Mitchell superintendent of the car department of the Delaware, Lackawanna & Western, with headquarters at Scranton, Pa., died suddenly on June 14, at the age of 52. Mr. Mitchell was born on February 23, 1889, at Prescott, Ark., and entered railroad service on June 1, 1907, in the car department of the St. Louis-San Francisco, where he served until June, 1908. From August 1, 1908, to July 1, 1910, he was car repairer with the Prescott & North Western. He became car inspector on August 1, 1910, with the Memphis, Dallas & Gulf at Nashville, Ark. On January 1, 1912, Mr. Mitchell was appointed inspector on the latter road, subsequently being promoted to general inspector. On August 7, 1916, he became air brake inspector and Baker heater man with the San Antonio, Uvalde & Gulf. He became general foreman and master car builder for the Memphis, Dallas & Gulf on February

4, 1917, and four years later he entered the employ of the Texas & Pacific as general car inspector. Mr. Mitchell entered the service of the Lackawanna on April 4, 1936, as general car inspector and two years later he was advanced to master car builder. On October 16, 1939, he became superintendent of the car department, the position he held until his death.

Grier Ralston Smiley, chief engineer of the Louisville & Nashville, with headquarters at Louisville, Ky., whose death on June 10 at Miami Beach, Fla., was reported in the *Railway Age* of June 14, was born at Moffatts Creeks, Va., on February 6, 1880, and graduated from Washington and Lee University in 1902. He entered railroad service as a rodman on the Hudson River division of the New York Central on September 1, 1902. Later he was made instrumentman, and on October 15, 1905, he was appointed a division engineer on the Florida East Coast, later becoming superintendent of construction in charge of the Key West extension. He entered the employ of the Louisville & Nashville on May 28, 1912, as resident engineer in charge of the construction of the Winchester and Irvine branch. On July 15, 1915, Mr. Smiley went with the Nashville, Chattanooga & St. Louis as assistant engineer and as such was in charge of that road's interest in the construction of the Chicago, Burlington and Quincy-Nashville, Chattanooga & St. Louis bridge over the Ohio river, connect-



Grier Ralston Smiley

ing Paducah, Ky., and Metropolis, Ill. He reentered Louisville & Nashville service on January 15, 1917, as special engineer, with headquarters at Bay St. Louis, Miss., which position he held until September 1, 1917, when he was appointed assistant engineer. On September 1, 1920, he was promoted to chief engineer of construction, and on April 1, 1931, he was further advanced to assistant chief engineer. On August 1, 1933, he was promoted to chief engineer, which position he held until his death. Mr. Smiley was a director of the American Railway Engineering Association, was president in 1936 of the Kentucky section of the American Society of Civil Engineers and served as a director from 1927 to 1933 and president in 1932 of the Engineers and Architects Club of Louisville.